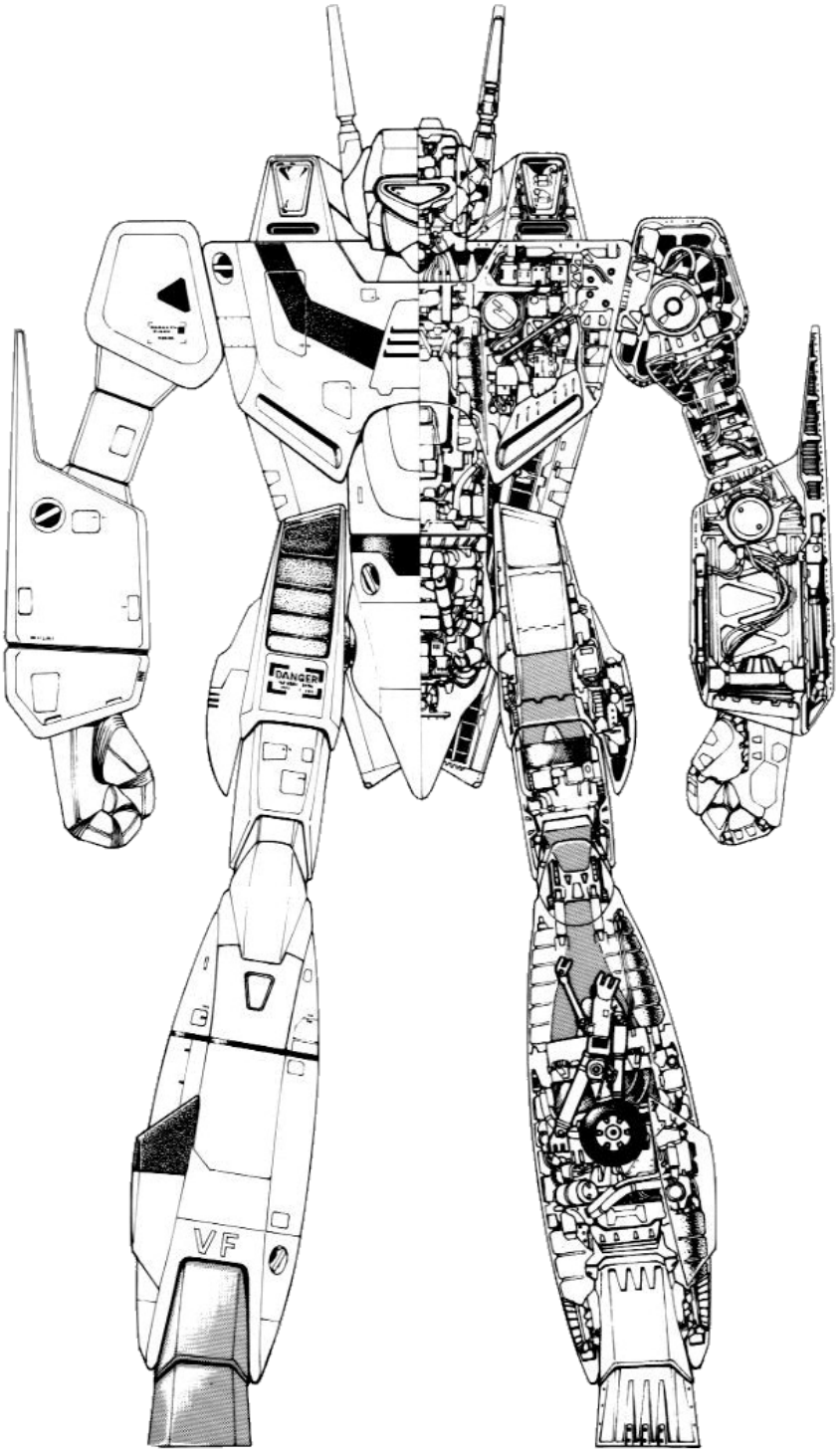
Sourcebook 4
Tech Manual

[Temporary Version]



About this book

This is the fourth sourcebook for Macross 2050. This book contains all of the information about all of the mecha and capital ships of the UN Military, the Zentraedi, Anti-UN forces and Varauta that have ever been used. It also has basic weapons, armor, technology and equipment for civilian or other use. A lot of the mecha and capital ships are reprinted in previous books, and are compiled in one sourcebook here. This is the compiled book of equipment and technology used in Macross. This manual does not include information from Sourcebooks 5 through 8.

The Mekton Zeta and Mekton Zeta Plus books are needed for further explanation of certain key systems and for making new mecha, although I will present as much as needed without reprinting entire sections of those books here (this book is going to be big enough as is).

The last couple of chapters include my notes as to why particular things were converted as they are, as well as a glossary of phrases and terms used in both Mekton and Macross.

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Preface

To make use of this sourcebook, certain elements must be defined. Rather than duplicate common information in each chapter, this preface will contain all such notes and information that apply to the book as a whole. References to Zentraedi pertain to both Zentran and Meltran; while Zentran and Meltran refer to the specific gender.

Capital Ship Notes

The stats and CP costs of capital ships do not include the CP of any mecha or shuttles carried. All capital ships are assumed to have sufficient life support, escape pods, airlocks, docking ports, food stations/mess halls, showers and bathrooms to accommodate

their full crew. In the case of Zentraedi vessels, parts of the crew quarters are actually stasis chambers, and UN vessels will include some recreation rooms.

Unless specified, all capital ships are assumed to be re-entry capable. Most capital ships are not designed for landing on hard ground and will suffer extreme damage from attempting. Such vessels can land safely in a sufficient body of water and remain afloat as long as the hull hasn't suffered more than ½ of its maximum Kills in damage.

Speed Conversion

Many of the variable fighters have varying velocities depending on their relative altitude due to the air coolant intakes. Rather than listing out multiple speeds for each VF at varying altitudes (for each mode), assume a VF is limited to about half of its maximum thrust at 10,000m or less above sea-level, and full thrust at 30,000-42,000m above sea-level. Furthermore, unless a specific velocity is listed for space, assume a VF can go 10% faster in space (yes, I'm ignoring the theory of infinite acceleration but the GM doesn't have to).

Many of the variable fighters will have two speed listings. One is the official listed speeds according to Macross Compendium, which compiles the information provided by the original designers. The other is the closest Mekton approximation. The GM can decide to use either the official speed or the Mekton speed.

Calculation of Mekton speed sometimes provides inconsistent results. One way is simply finding the variable fighter's maximum speed and converting that directly into Mekton MA. This sometimes yields speeds in excess of MA 109 (Earth escape velocity). The other way, given in Mekton Zeta Plus, is to find the weight and thrust of the mecha and using the formula ((thrust / weight) x8) to get the MA. In one instance, a Mekton speed of MA 234 was calculated.

More information under Chapter 16.

Improved Ground Movement

In Mekton, mecha ground speed is calculated solely by the mecha's weight. This is a bit.. bland. A mecha can improve its ground speed by paying a cost multiplier of x0.1 per MA over the base, which is only applied to the movement system. This is commonly used with Zentraedi battle pods.

Example 1: A mecha with +3 walking MA would pay x0.3 cost multiplier to the leg servos.

Example 2: A mecha with +20 MA wheels would pay x2.0 cost multiplier to the wheel cost.

Afterburners

Afterburners dump fuel into the exhaust rather than the mixing/reaction chamber. This raises the thrust, but is far less efficient. Kicking in the afterburners on Thrusters increases thrust by 50%, but uses 4 times as much fuel. Cost for Thrusters w/Afterburners is 0.45 CP per Ton per MA instead of 0.3 CP.

Ship Hull Conversion

Converting the capital ships of the Macross universe into Mekton is tricky since the sheer number of weapons and mecha/crew compliment far exceeds the spaces allotted

by hull size. Even using space efficiency on weapons (cannot be used on crew, mecha bays and cargo space), it simply is not possible to fit everything that should be there into the space allotment. The main problem is that most capital ships are much larger and heavier than the hull size listing in the Mekton book reach. In Mekton, any ship that is more than 2,200,000 metric tons is Mega-Heavy; almost all capital ships exceed this by a significant amount. The Zentraedi Nupetiet Vergnitzs-bis flagship itself is 270,000,000 tons, over 100 times as heavy as Mekton is used to dealing with. Again this leads to a lack of space for all the systems and needs of the ship to contain, not to mention making such a beast quite fragile.

There are a handful of ships that simply did not have enough space based on their hull class (mostly the Varauta ships and a couple of UN Spacy ships). Furthermore, some ships (again, mostly the Varauta) ships have been listed with conflicting masses; one reference says a particular ship is 60,000 tons while another says 6,000,000 tons. Specific notes are listed under the appropriate profiles.

More information is outlined in Chapter 14.

Fuel

In Mekton, mecha are assumed to have an amount of "fuel". This matter is a little ambiguous by the fact that variable fighters (capital ships and Destroids as well) use thermonuclear reaction engines with an average life span of 10-12 years for "Mekton scale" mecha. However many stats in regards to the early VF series (VF-0, VF-1, VF-4, SV-51) mention fuel payloads, especially under the information for FAST packs that "contains extra fuel for training" or "does not contain fuel because of the amount of power generated by the new style of reactors". Most capital ships have a life of 30 years before needing more fuel for their reactors. It also shows even AVF units being refueled.

This gets further muddled by the fact that in Macross DYRL, Hikaru and Misa traveled *all over* the Earth checking if any major cities survived intact in their VT-1 trainer. Granted, it did have additional fuel in the FAST Packs and they likely didn't travel at full speed the whole time.

I am using alternate fuel rules that will be outlined below.

<u>Revised Fuel Rules</u>

The rules for fuel in Mekton Zeta Plus are actually quite ridiculous, particularly concerning space flight. In space, 1000km is a short distance. Also take into consideration that travelling 1000km in space doesn't require burning fuel the entire time; just a short burst to get initial momentum and just coast along. Furthermore, keeping tabs on every 1km you travel is needless bookwork.

Mecha travel in an atmosphere is treated as normal since flight will require continuous fuel consumption to stay flying.

For mecha travel in space, the idea of Burn Units (BU) is more practical. Each BU is the equivalent of 250km of fuel in terms of cost, space and weight. A typical mecha with minimum standard fuel load would carry 4 BU (1000km) of fuel like normal.

So what does a BU allow? Expending 1 BU allows a mecha in space to change its orbit. Leaving a carrier (without assisted launch) burns 1 BU; most UN Spacy carriers have launchers. Interception of enemy units in a different orbital trajectory requires another BU; as does leaving the battle, evacuating a doomed ship or returning to home

base. Actual fuel expenditure during combat is minimal compared to these, so assume a full normal battle takes 1 BU through combat maneuvering.

Landing on a planet or similar size body requires 1 BU. To land on a planet with little or no atmosphere requires BU equal to twice the gravity (G). Landing on a planet with an atmosphere still requires the re-entry environmental package. Leaving a planet requires boosterpacks, overthrusters, MA 109+ or the transatmospheric ability and requires four times the planet's gravity in BU. There is no fraction BU, any leftover is simply rounded down and assume to be expended.

Thus a variable fighter at the very basic fuel payload rules of 4 BU would be able to race away from their carrier to engage in battle (1 BU), engage in combat (1 BU) and return to home base (1 BU), leaving 1 BU for emergencies such as having to travel to another vessel for landing or to pursue the enemy.

Life Support

All UN forces mecha have life support to sustain 2 people for up to 2 weeks, while Zentran and Meltran mecha can support 1 person for up to 1 week. Life support is indicated for each capital ship in their appropriate listing. Capital ships can support up to 50% more people for ¼ of the time listed before the air becomes toxic. Life support also includes all food stores and water supply for the ship. This is an important aspect to keep track of, as shown in Macross Frontier.

Propulsion

Since all capital ships are based on the same Protoculture technology, they share common features regarding propulsion. Unless specified in the individual entry, all Macross capital ships have the following propulsion systems (includes all UN, Anti-UN, Zentraedi, Varauta and anyone else). If a capital ship has different propulsion abilities, it will be detailed under the particular entry. All of these are considered Starship scale and will need to be scaled for other scales.

Anti-Gravity Drive – Sometimes it is also called a contragrav drive, this is used for VTOL style takeoff and landing on planets at a rate of 400m per minute. Only the smallest vessels do not use this system. In Mekton, an anti-gravity drive takes 1 space, has 20 Kills and costs 250CP per Hull class.

Sublight Engines – Most capital ships have sublight drives that can reach around 0.20 of the speed of light, roughly 61,050 km per second (some Meltran ships can travel faster than this). They rarely travel at this speed, as mecha are unable to keep up, being only able to attain a maximum atmospheric thrust of around Mach 22 (the latest VF's.) Most capital ships have a typical cruising speed of Mach 1 to Mach 4 (MA 22 to MA 40). UN Spacy capital ships can produce 0.1g acceleration in space, and can produce bursts of acceleration up to 1.0g for up to 12 minutes at a time. Secondary engines can provide up to 0.5g acceleration for up to 12 minutes maximum.

Also, weapons ranges do not exceed 165,000 to 330,000 km, and combat would be impossible at such speeds. Travel at this speed does maintain the problem that something 5 mm in size being able to punch through a ship’s hull as it travels at sublight speeds and destroying the entire ship, hence the reason why starships feature magnetic shields that function the same as a planets atmosphere in pushing aside/repelling minor space debris. The magnetic shields of vessels are not strong enough to contain an

atmosphere but they do protect against micrometeorites. This shield has nothing to do with the pinpoint barrier systems, and remains active as long as the ship has power. Sublight engines take no additional space or Kills since they are part of the basic thrusters, and the magnetic shield generator is considered part of the package.

The Zentraedi capital ships use the same technology base as the UN Spacy, although they have some differences. Zentraedi vessels can maintain 0.23g acceleration for up to 5 hours 6 minutes, with bursts of up to 1.1g acceleration for 8 minutes. The emergency thrusters can provide 2.1g acceleration for up to 10.8 minutes. Sublight speed is 0.001 the speed of light, or approximately 200-300g.

Space Fold Generator – Space folding is a form of superluminal flight, or more commonly known as hyperspace travel. Because the Protoculture who developed this technology were considered to be TL10, all such space fold generators are capable of traveling at up to $5.25x10^{10}$ kmps, or 1 light year every 6 minutes (as Misa Hayase stated "one hour in super dimensional space is ten days in real space"). What the fold drives does is push the ship into hyperspace; a dimension adjacent to our own dimension, but one where distances are far smaller. Thus the travel time between distant places is shorter due to the shortened relative distance. Most capital ships extend their space fold "bubble" out 100-1000m around the ship, allowing them to take large groups of mecha and smaller ships with them, although later fold engines create a "portal" that they pass through.

Note that unlike other sci-fi games and series, the space folding has more of a teleporting appearance than the "stretchy star field" effect (such as in Star Wars). This teleporting effect is the mecha or capital ship actually slipping into or out of this sub-dimension and not the actual travel. Travel in this sub-dimension appears as a colorful field of bubbles (as seen in Macross Plus), although in Macross Frontier it appears quite different.

This brings up the question of why colony fleets don't just use super dimensional space to get across the galaxy in a fraction of the time. The first main reason is that the further a ship or fleet folds, the more navigational hazards there are to account for. The other main reason is that the further the space fold, the energy requirements increase geometrically. For example, folding one LY takes one "unit" of energy. Folding two LY would take two, folding three might take six and folding ten might take 50. Furthermore, Macross Frontier shows that there are "fold faults" throughout the galaxy that force ships in superdimensional space to reenter normal space, and these must be navigated around. They may be more common closer to the core of the galaxy, and thus may be caused by the intense radiation and the supermassive black hole at the core. Fold jumps of 800-1000

LY or more are considered “long distance” and require massive amounts of energy. Folds of 30 LY are considered “short distance”. Typically a fleet will space fold 20 or so lightyears and take sensor readings of the area while waiting for the space fold generator to recharge.

Eden is 11.7 lightyears from Earth, so it would have taken Isamu (and Guld) using the prototype variable fighter booster (rated 1 lightyear every 90 minutes) about 1,053 minutes to travel from Eden to Earth (17 hours, 32 minutes). That's actually pretty damn good.

The last main reason is if they just teleported around to where they needed to go, they would have little opportunity to do exploration.

Weapon Systems

Despite cosmetic and minor mechanical and cosmetic differences, most capital ship class weapons of the same type and class will have similar ranges, payloads and damage rates since they are all based on Protoculture technology. To simplify this, Chapter 14 has details on all capital ship weapon types. Individual vessel listings will have the type and amount of each weapon mounted and only a quick list of stats for the weapon. Unique weapon systems will have details listed under the individual entries or race technology sections.

Ammunition vs Weapon Cost

In the basic Mekton rules, ammuntion and missiles are subject to the cost multipliers of the mecha, which leads to some really indecent CP costs. I felt this is inaccurate, since missiles aren't actually affected by the systems covered by cost multipliers. For example, active stealth systems specifically state they don't affect anything *outside* the mecha; while you can't see a VF-19 on radar, the missiles would simply appear on the scope once they leave the mecha's body. Missiles also don't transform, aren't transatmospheric capable, don't have environmental protections and so forth. So why should missiles have their CP increased? An LRM fired from a VF-19 is no more effective than if it were fired from a VF-1 (other than FCS modifiers).

Likewise, hand-held weapons such as Hughes gunpods should not be included in the basic mecha design, since the weapon will work just the same if used by any variable fighter, or even a macronized Zentraedi.

To this end, any ammunition for ballistic weapons and missile payloads will be a separate CP cost added on after the final CP cost of a mecha is calculated. This will maintain two basic concepts:

1) missiles and ammunition are mass produced to the same standard, and should/would not cost more or less depending on what variable fighter, capital ship or destroid equips them

2) this helps reduce the overall CP cost of the mecha

Missiles are handled this way: the launcher will cost 1 CP per missile carried or by a specified cost for variable payload pallets, and will have Kills/Spaces equal to the total damage of the missiles of that laucher divided by 15 (standard rules). Thus a launcher of 45 micromissiles will cost 45 CP and be 9 Spaces/Kills before efficiency.

Zentraedi Vessel Note

Unfortunately, there is little concrete information about the Zentraedi ships other than their dimensions and weight. Most of them simply state something along the lines of "guided converging beam weapons (many)" or the like. Their weapons and mecha compliment are based on the Palladium information and stats. Furthermore, many of the weapons numbers and mecha compliment are adjusted to be more realistic to the amount of space a given ship has. Thus a Zentraedi ship will only be listed with a few hundred Regult as opposed to a few thousand. Most changes are based on official information found at the Macross Compendium website.

Pull the Lever Marked B!

In the early 80's, anime sometimes tended towards gimmicks, such as the three levers to transform the variable fighter. This would be considered a design flaw, as the seconds it takes to reach up and pull the lever could cost the pilot his life. Therefore throughout this book, such gimmicks will be ignored in favor of more "realistic" designs. For example, the VF-1 will use the DYRL movie cockpit instead of the series one.

CP vs. Cost

Construction Points, or CP, are used to give a mecha or capital ship an overall combat value; two mecha both worth 250 CP should be relatively equal in combat. This figure is somewhat arbitrary, as a mecha with exceptionally strong armor can't be hurt by a mecha with lower output weapons, and a scout mecha isn't likely to go head-to-head with a main battle mecha. Depending on how the CP is distributed towards servos, armor, weapons, sensors, and additives/multipliers, two mecha worth the same CP can be worlds apart in function.

Another issue to deal with is "CP cost" vs. "monetary cost". Destroids were considered to be lower "cost" to build and maintain than the VF-1 series, yet most destroids cost more CP than the VF-1 (the VF-1 is said to cost "20 times" as much as a destroid). Similarly, the VF-171 was a VF-17 with many of the more expensive and difficult systems removed, yet it costs more CP (the difficulties of passive stealth design cost more than simply installing an active stealth system so other components do not cost so much to design and produce).

The simplest way to keep this sorted is not to think of CP as "how much money" the mecha is worth, but rather the complexity of the design. A 600 CP mecha doesn't have to cost more money than a 200 CP mecha, it is just three times more complex to produce.

"Invincible"

Fleet vs. fleet combat is quick and brutal, with each side firing potentially hundreds of high-output energy beams and missiles the size of variable fighters. To protect against the G-Factor, the "main" ship of the fleet and/or whatever ship the characters are stationed on get the *invincible* trait.

Ships with this trait will never explode no matter how many incidental powerplant hits or critical system damage is scored. This is not to say the ship won't take damage or even be crippled for a while, but such a ship shouldn't be sunk by a random stray shot. Such a ship should only be destroyed as a cinematic (and very dramatic) event.

For example, the Macross Frontier suffers massive damage and loss of environmental stability as well as most of its island clusters, but it survives against all odds to land on the Vajra homeworld. The same thing happens to the Macross 7 colony ship making it through the Varuata War. The SDF-1 Macross also takes a good amount of damage on its journey back to earth, and once there it has the main cannons and much of the body nearly destroyed by Quamjin and Laplamis's suicide charge, but the Macross survives it all to become the UNG headquarters. Such ships are legendary.

Technology Level (TL)

The TL represents the overall technological advancement of a race, culture or planet. Tech level is typically rated between 0 (no progress) to 11 (beyond superscience). In a science fiction setting, TL becomes very important. This typically breaks down like thus:

TL	Age	Weapon Tech	Propulsion Tech	Medical Tech
0	Pre-Neanderthal	Clubs (branches)	Walking	Unheard Of
1	Stone	Napped Flint	Walking	Keep Dreaming
2	Bronze	Bows/Spears	Riding Beasts	Bloodletting
3	Iron	Swords	Trained Animals	Basic Pharmacy
4	Industrial	Firearms	Combustion Vehicles	Basic Surgery
5	Nuclear	Missiles	Jet Vehicles	Advanced Surgery
6	Information	Railguns	Walking Vehicles	Meat Cloning
7	Superconductors	Beam Weapons	Civilian Fliers	Full Cloning
8	Cybernetics/Biotech	Energy Melee Weapons	Anti-Gravity	Regeneration
9	Nanotech	Reaction Weaponry	Superluminal Flight	Resurrection
10	Superscience	Anti-Planet Weaponry	Teleportation	Immortality
11	Transcendence	Anti-Star Weaponry	Thought	Genesis

*Reaction weaponry is "pair annihilation", so most likely anti-matter.

The downside to this is it assumes the society advances at the same rate in all possible fields simultaneously. This is impractical and often doesn't fit with the society's beliefs. The following rules further detail this out to allow a society to advance in fields that are important to them while ignoring fields that are distasteful or even unknown; such as a race that focuses on cybernetics while forsaking biotech, or vice versa.

As an example, the Earth (circa early 2012) is TL7 for the age, TL6 for weapons, TL5 for propulsion and TL5 going into TL6 for medical tech. So overall Earth would be TL6.

Fields of Technology (FT)

There are hundreds, if not thousands, of fields of technology. Typically they will be headed something like the following examples:

Aquatic Equipment	Computer Equipment	Exploration & Survival Gear
Communications	Medical Technology	Personal Conveniences
Police & Security	Sensory/Scientific Equip	Spycraft Gadgetry
Utility Tools	Environmental Equipment	Vehicle Technology
Mecha Technology	Cybernetic Technology	Armor Technology
Weapons Technology	Genetic Engineering	Cloning Technology
Space/Time Distortion (TL9+)		Terraforming Engineering

This will allow a GM to determine the overall capabilities of a colony or race. Given that the Protoculture were able to create super powerful biological weapons, space fold engines, armies of giant clones and all manner of particle beam weapons and antimatter explosives, they are considered TL10 (or possibly TL11). Now since the UNG/NUNS reverse engineered most of its super-tech from them, the human society is also TL10 even if they don't understand some of the tech they use.

Example: On the Macross Frontier, cybernetics are illegal, but they are understood, the Cybernetic FT on Frontier is likely around 7. On the Macross Galaxy however, they push the limit of cybernetic advancement and almost everyone has some sort of implant or replacement, so Galaxy's Cybernetic FT is 10. On Earth circa 2009, there are no cybernetics, although we have simple implants such as pacemakers or insulin injectors and non-mechanical limb prosthetics, so the FT then is 1.

Tech Legality Class (TLC)

This rating indicates how legal the technology is. In the Macross setting, this rating can vary depending on the laws of the colony or fleet. In general TLC 0 is legal with no questions asked, while TLC 10 can be a federal offense to have that technology.

Example: Again using the Frontier/Galaxy fleets, the Cybernetic TCL on Galaxy is likely 1 (registered but free) while the TCL on Frontier is likely 8 (you will be arrested and deported).

Tech Variation Types (TVT)

This helps define not only the quality, but also the reliability and expense difference in consumer class variations. There are two main types; Civilian Variation Type (CVT) and Military Variation Type (MVT). Both headings have three sub-headings unique to each in purpose, but similar in class.

TL Modifier: This is the starting TL for each variation type.

TL Cost Modifier: This is the difference of value for each of the variation types.

Debugging Percentage: This indicates how much of a Technology is understood with all the unwanted kinks being worked out. The higher the percentage, the more reliable the tech is and less failure prone.

CVT	TL	TL Cost Modifier	Debugged Percentile
Commercial Tech	-1 TL	x0.75 for any TL below	90% +2% for each TL below
Industrial Tech	TL	x1.0	85%
Research Tech	+1 TL	x1.5, x2.5 cumulative per TL above	70% -5% for each TL above

MVT	TL	TL Cost Modifier	Debugged Percentile
Military Standard	-1	x1.2, x1.0 for any TL below	95% +2% for each TL below
Military Advanced	+1 TL	x2.0	75%
Military Research	+2 TL	x3.0, x5.0 cumulative per TL above	55% -5% for each TL above

Commercial Tech: Civilian tech that is the most common around and is used mostly in the home, small business or for light industry.

Industrial Tech: Civilian tech mostly used for the wealthy, big business or heavy industry.

Research Tech: Civilian prototypes and advanced industry.

Military Standard: Military tech for light, low and/or extensive military use.
Military Advanced: Military tech for heavy, high and/or secretive military use.
Military Research: Military prototypes and ultra-secretive military use.

Retrotech

Retrotech is technology from previous Tech Levels brought up to current TL standard without extensive rebuilding. For example, the upgrade of the VF-1 to VF-1X Plus is retrotech, and upgrading many of the older variable fighters for use in Vanquish racing are retrotech.

None of the mecha/starship profiles use the Retrotech rules as base. It is assumed as each new model comes out, that it sports the current "top shelf" tech that is available at the time it is produced. Furthermore, Earth effectively jumped to TL10 without a lot of the "bridging" technologies; that is to say they simply reverse engineered the tech and began mass producing it rather than building up to it on their own.

Cybertechnology does use the Retrotech rules.

General: One TL after a technology comes out, its cost drops to 1/2. Two TL after it comes out, it drops to 1/4 cost.

Gadgets: Unless specified otherwise, all machines, save weapons, vacuum suits and other survival suits or body armor, weigh up to half as much one TL after being introduced and 1/4 as much after 2+ TLs (round down).

Armor: Body armor has increased SP and SDP.

Power: All power-cell-using equipment gains shots or increased operating time at higher tech levels; an extra 50% of power for each tech level after the one in which the device was first introduced. This is because the high-tech cells contain more power. However, many devices also make better use of the power they have available. For weapons, that means they have more shots (not higher damage) and are more powerful.

Energy Weapons: Beam weapons, gauss/railgun and power melee weapons have their damage multiplied by x1.1 per TL after the weapon was available, and multiply energy shots by x1.25 per TL.

Other Weapons: Slug-throwers, chemical and other firearms do not increase damage, but gain access to more advanced ammunition types. Explosive warheads have a 50% damage increase at TL9 but no further improvement. Exotic warheads such as sonic, nuclear, etc become available.

Cybernetics: Cybernetics become available at TL8 at a Cyberpunk standard. At TL8.5 they increase to CyberGeneration standard and have HL reduced by 1/2. Humanity loss further decreases to 1/4 at TL9 and to 0 at TL10. Surgery time and cost is reduced by 1/2 at TL 8.5 and to 1/4 at TL9. Often cybernetics less than TL9 are called "dead metal" while those of TL9+ are called "live metal".

Repairs System

Repairing a single mecha is a simple process in the game. But what about the maintenance teams onboard a capital ship or at a base? The rules below represent the often overworked and un-thanked mecha repair crews. The following rules also work for all scales from human to excessive.

Technician Unit

The basics of this system is the Technician Unit (TU), which indicates how much repair work can be done by a single technician and their support teams. The TU value is equal to the technician's TECH + Mecha Tech. TU are expended in 8-hour Repair Periods (RP). This all assumes the technician has access to proper tools, replacement parts and needed energy.

1 TU will cover 1 RU

Example Technician: For the following rules we will be using technician Meghan who has TECH 9 and Mecha Tech 6. This gives her a TU value of 15. So she can handle up to 15 RU per 8-hour work shift.

Calculating Repair Units

The number of TU needed to repair an object are calculated in Repair Units (RU). The RU is calculated according to the system type.

Servos: Servos get calculated at a rate of Kills x5. When they take damage, the components are repaired one at a time. Example, a VF-1A has a torso servo of 6 Kills, so it would take 30 RU.

Armor: Armor is calculated by the Stopping Power x Damage Coefficient. Armor is repaired at a rate of 1 SP per RU. Example, a VF-1A torso has SP3 standard armor, so it would take 3 RU.

Systems: This includes weapons and any sub-system that has Kills, such as sensors. Systems are calculated at 1 RU per Kill. Weapons calculate as their Damage (ignoring BV) x Kills. Example, the head mounted laser on a VF-1A inflicts 1K and has 1 Kill, so it takes 1 RU.

Flight System: These include jump jets, thrusters, GES, anti-gravity engines and so forth. They are calculated at their full MA x Spaces per 1 MA to be restored. Example, a VF-1A thruster takes 2 Spaces and provides 8 MA, so restoring 1 MA loss takes 16 RU.

Cost Multipliers: Any cost multiplier system that takes no Spaces takes a number of RU equal to their cost multiplier x100. Any cost multiplier system that takes Spaces, such as verniers, takes a number of RU equal to their Spaces x cost multiplier x 10. Examples, an active stealth system (x1.05) would take 105 RU while the standard verniers on most VF units (5 spaces, x0.1) would take 5 RU.

Repair Time

The time it takes to repair a damaged mecha is dependent on various factors, including how many TU the technicians have, the amount of damage, and how long the players want to spend repairing. As stated above, repairs are done in 8-hour repair periods.

Any number of repairs may be done in a single Repair Period so long as the amount of TU expended by the technician in a period remain the same. Systems are

repaired one level at a time, requiring a repair roll for each level. When one RP passes, the repairing player rolls on the Repair Difficulty Table below.

Example: Meghan is attempting to fix a VF-1A's left thruster block (8 MA). The RU calculation is MA x Spaces, which in this case is 16 RU per MA, for a total of 128 RU (16 x 8). She only has 15 TU, so it will take her 8.5 Repair Periods (68 total hours). This assumes of course she is working by herself.

Repair Difficulty Table

Repair Units	***Difficulty***
RU less than half the Technician's TU	15
RU greater than half or equal to the Technician's TU	20
RU greater than or equal to twice the Technician's TU	25
RU greater than twice the Technician's TU	30

Repair Modifiers

Condition	***Modifier***
Techscanner	+2 to player's roll
Proper Tools and Equipment	No modifiers
Specialized Tools and Equipment	+5 to player's roll for that repair only (GM decision)
Lack Equipment	+5 to difficulty
Completely Improvising	+10 to difficulty
Working Alone/Too Few Technicians	+5 to difficulty
Fatigue	+5 to difficulty after three consecutive RP, +5 for ever RP after that (see Endurance rules).

All rolls are made after the technician spends the number of units needed to make the roll. This could take an extended period of time, which might force the use of endurance rolls.

If the technician succeeds, the system is repaired. If they fail, they have to start all over again, but one difficulty lower. If they critically fail, they have to start over, but one difficulty higher. A critical success can either mean near-instant repair or "accidental miracle" at the GM's discretion.

Additional TU can be expended to lower the difficulty of a roll. For every additional amount of TU expended equal to the base cost, the difficulty drops one level.

Conversely, a technician can be pushed to hurry. This will double the TU of the technician but all repair rolls increase by one difficulty level.

Example: Meghan is busting her butt to fix that VF-1A's thruster block. She makes her first skill check on repairs after an 8-hour repair shift, rolling TECH + Mecha Tech + 1d10 at DV 20. She gets a total of 32, and restores 1 MA to the thrusters. She then gets some sleep to continue the next day.

<u>Endurance</u>

The normal repair rules assume that technicians work in 16 hour shifts (2 RP), with 8 hours of break time. If the situation is desperate, the technicians can work longer, skipping breaks. When they work longer than four RP consecutively (32 hours), they start

to take a +5 cumulative penalty to the DV. Once they get to rest, it takes two consecutive RP to rest per level of penalty.

Example: Meghan's team is pressed to get repairs done before the next attack, working 6 consecutive RP without rest. During the 5th RP she suffers a +5 DV, and in the 6th RP she suffers a +10 DV. Once completed, she will need a full 4 RP before the penalty is completely gone.

Multiple Teams

The normal rules assume a technician and a couple assistants per repair job (typically 3 technician's worth of TU). If desired, multiple teams can work on the same project. In this instance, the TU is added up. Each team makes their own skill roll for their part in the repairs. If the successes exceed the failures, the system gets repaired as normal. If the failures cancel out the successes, no progress is made. If the failures exceed the successes, the system becomes worse. For this, critical successes/failures count as double.

Example: Meghan needs to get this VF-1A running sooner than later, so she pulls over two additional teams each with 12 TU. Adding this to her skill it gives the group 39 TU for the shift. They each make a roll and succeed, reducing the RU on the thruster block by 39 instead of just her own 15, bringing it down to 89 RU.

Annual Overhaul

For every 1000 game hours of operation, a mecha needs an annual overhaul, which is calculated at half their CP in RU. If a mecha costs 300 CP it will take 150 RU to overhaul it. This represents replacing worn parts, updating the combat computer data, and so forth.

If this is skipped, the mecha takes a -1 cumulative penalty to all systems (WA, MA, MR, etc) for every 100 game hours of use past the overhaul time. Once it reaches 1000 game hours past overhaul, the mecha takes a single critical hit that cannot be repaired until after being overhauled.

Internal Automation

If a mecha has Mecha Tech as one of its programmed skills, the mecha itself can assist with self diagnostics. The mecha's own TU are calculated by doubling the Automation rating, and it can assist as many technicians as it has Portfolio points. Internal automation systems cannot make the actual repair rolls unless sentient, but can add their TU to a technician's. Internal automation ignores Fatigue rules.

Techno-Organics

Techno-organics repair themselves, but they can be assisted in their repairs. On a techno-organic mecha, the RU of any servo or armor is halved. On a regenerating mecha, the RU for all repairs are halved. On a regenerating techno-organic mecha, the RU of any system is reduced to 1/4.

Modification

Modification comes in two main types. The first is replacing a system with a new system. The second is adding a system that wasn't there to start with.

Swapping out a system takes two repair rolls. The first is to dismantle the system to be replaced, and the second is to install the new system. If the removal skill roll fails, it takes twice as long to remove. Installing the new system takes RU equal to the CP of the system.

Installing an entirely new system is different depending if it is has a CP cost or a cost multiplier. For CP cost systems, it takes a number of RU equal to the CP as above. Cost multiplier systems are trickier. If the cost multiplier system takes no Spaces, it takes RU equal to the CP difference of the mecha with and without the system. Cost multiplier systems that have Spaces cost as a non-Space cost multiplier system plus the Spaces x5. All costs round to the nearest full number.

Cinematic Delay

In most mecha anime, repairs take *exactly* one minute longer than the detection wave of the next attack. While the above rules are good for realistic estimations, they aren't very cinematic.

With this optional rule, pilots who had damaged mecha will be kept out of the first 6 turns of combat while they wait on last second repairs. Quite often the pilot himself will be making final adjustments while en route to the battle!

Chapter 1 – UN Variable Fighters

Macross in the Mekton system has some issues and technological points to be addressed. Also listed below are some of the standard features common to almost all variable fighters. Mekton Zeta Plus is needed for the information and notes regarding all mecha parts.

The variable fighter is the most famous tool of war seen in Macross. There are several production types, each with multiple variants and upgrade versions. Many other RPG sources give the average VF stats to make it the equivalent of a tank - this is not the role of a VF. The VF is intended as an air/space superiority fighter designed as a fighter, interceptor or bomber.

Variable Fighter Combat Essentials

Before you think that variable fighters are all-powerful, un-hittable combat monsters, here are some of the rules from the basebook that should be kept in mind during high-speed long-range combat.

Speed WA Penalties: up to MA 16 is no penalty, then it is -1 WA from 17-24, and increases by -1 for every 8 MA thereafter (-2 at 25-32, -3 at 33-40, etc).

Weapon Travel Times: energy beams are instant, ballistics are MA 30 (1.5km/turn) and missiles are MA 40 (2km/turn). Hypervelocity railguns can reach maximum range in 1 turn.

Combat Range/Maximum Range: Ranged weapons have a listing of their combat range. They can hit out to their combat range x combat range, which is their maximum range, with a -4 penalty. Weapons with the "long range" trait negate this penalty.

Configuration Modifier: Most of the time, the fighter configuration of a variable fighter has 2 less MR than the battroid, reducing the accuracy of ranged attacks.

G Load: While accelerating, the variable fighter and its pilot have increased G-force applied to them which also causes additional penalties.

So if you fire from too far away while moving at top speed, don't expect to hit much. This is why a lot of "dogfight" combat in Macross is done at closer range in battroid configuration.

For example, a VF in fighter mode travelling at MA 20 firing a gunpod at a target 10 hexes away will have a -5 WA penalty and the MR is 2 less while in fighter mode.

Note on -X Models

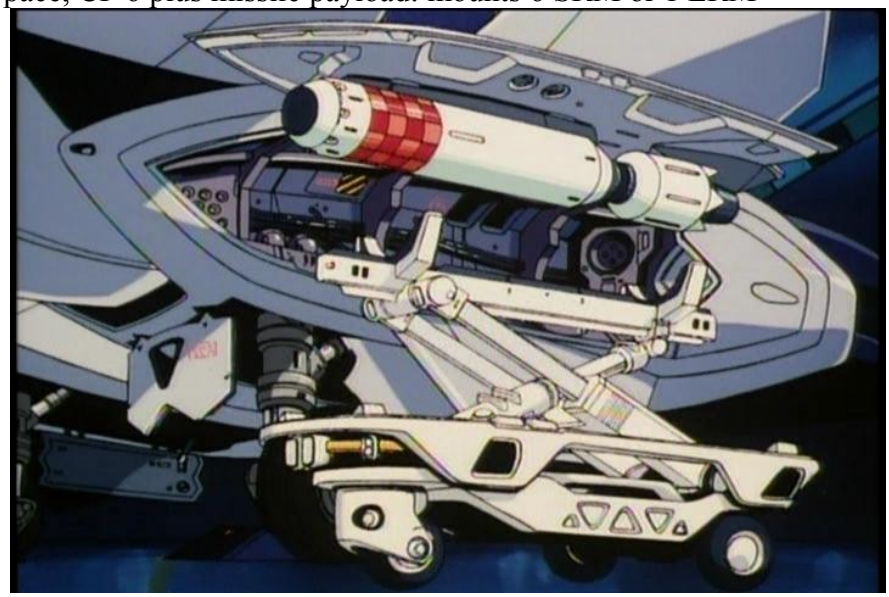
Typically before the transformation ability or other "extras" are included in a variable fighter, there is a non-transformable "X" model built. This unit serves as a test piece to make sure the airframe and other critical systems will work properly. If the GM needs to include such a unit, take the finished model and reduce the CP by half to get a rough estimate on the CP of the mockup unit (for purpose of research & development and building of the test type). Note that the -X models in the VF-X section are assumed to be transformable, even though most of them were never fully developed. Yes the CP won't be completely accurate, but the prototype isn't going to be efficient anyway; but you can reverse engineer the accurate CP if you wish.

Note on VF-11 Thunderbolt

In the footage from Macross 7 in which the fleet is preparing for Operation Bluegazer, it shows the VF-11 being loaded with reaction missiles in internal leg pallets similar to those of the VF-19. Shoji Kawamori's final designs did not include such weapon options (the internal pallet was an earlier design), and the inclusion in the animation was actually a mistake. For those who insist the animation doesn't make mistakes and takes precedence over design notes, assume the launcher uses the following stats, otherwise assume these are early design VF-11MAXL units.

*It appears the leg pallets are made part of the VF-11C variant by Kawamori, which are the standard for the Macross 7 fleet.

1 Kill, 1 Space, CP 6 plus missile payload: mounts 6 SRM or 1 LRM



Sensor & Communications Note

In Mekton, sensors and communications are bought in a single package and they share the same location, typically the head servo. In Macross, most variable fighters deviate from this on two points. First, their sensor and communications ranges will often not be of the same package type; the VF-1 has HS sensors but only MS communications. Second, they aren't located in the same servo; the sensors will be located in both the head servo and the nose of the fuselage, and the communications will be spread out throughout the torso servo.

In Macross, the sensors and communications will be separated into two systems. When choosing the sensors and communications, reduce the CP by half for each since they are purchased separately. Thus the VF-1 will have HS sensors (3 CP, 1 Space, 1K) and MS communications (2 CP, 1 Space, 1K).

Advanced Variable Fighters

Some of the more advanced variable fighters have a higher performance capability than most pilots can handle, leading to injuries or death, as the acceleration potential of the fighter can generate G-forces upwards of 20 and more. The VF-17, VF-19, VF-22 and VF-25 are notorious for breaking pilots, thus the UN military only allows their best pilots to use such machines. To represent this, any pilot must have the following in order to be rated to fly AVF units at the GM (and NUNS) discretion:

Mecha Pilot: VF Series 7
Pilot: Fixed Wing 7
BOD 7 (each rank of High Pain Threshold reduces this by 1)
REF 7
Genius 1 [Mecha Pilot: VF Series] or Ace Pilot

Other variable fighters may have special requirements, such as the VF-27 needing a cyborg pilot. The EX Gear reduces the BOD requirement to 5.

When such a variable fighter is piloted by someone who does not meet these requirements, the VF is "tuned down" to performance levels a normal pilot can withstand. Tuned Down: Regardless of the variable fighter's true potential, limiters are installed that set the following limits: MV +0, MP +100%, MA to 75% maximum. This has no cost modifiers.

Cockpit & Control Systems

Cockpit Features

Escape Pod

Almost all VF units are built so that if the mecha is destroyed, the computer will automatically eject the cockpit with the canopy intact. This module has a parachute that will deploy if ejected within an atmosphere. The module has enough life support for 2 people to live for 2 weeks and will send out a homing beacon that can be detected up to 640 km away for 60 days before the battery dies. The cost for this is listed with the standard options below. Some escape pods eject the entire nosecone and cockpit, while some only eject the cockpit assembly.

Heat & Radiation Shielding

Special shielding prevents the penetration of life threatening heat and radiation. A radiation detection and alarm system are linked with the shields and will sound an alarm if there is a rupture in the shields and what the levels of radiation are. Unless breached, this system will effectively block all cosmic radiation from the pilot (see Sourcebook 3, Chapter 11 for radiation rules)

Layout

The layout is similar to existing craft; with a side-stick controller (right) and multi-position throttle lever/transformation toggle (left), holographic HUD (cockpit canopy), laser optical tracking pointing system, an AI controlled integrated support system and two rear mirrors for viewing the rear seat.

In Mekton terms, the standard early-generation variable fighter cockpit is screen controls (+0% MP, cost multiplier x0) with a combination of clear canopy (SP 2) or armored canopy with blast shield extended (SP 3, 3K, alpha armor DC 2).

Avionics & Sensor/Communications Systems

Variable fighters have certain systems in common, with advancements going along with more advanced units. The systems tend to use the system splitting option between the head and torso servos.

Torso Servo "Body Area"

AOA (Angle of Attack) Detector - Detects the angle in which the wings meet the airflow to prevent stalls while increasing lift.

External Audio Pickup - Can pick up normal conversation levels up to 100m away.

Radio/Video Communications - The range will vary depending on the variable fighter in question. Regardless, it includes long range, directional, line-of-sight communications system with satellite relay capabilities. Range can be boosted indefinitely via satellite relay. The UHV and VHF antennas transmit and receive tactical, operational and administrative information and support line-of-sight communications. Uses the following antennas.

IFF/UHF Data-link Antenna: Receives IFF codes from other aircraft and identifies them as friend or foe. This eases in targeting and tracking your enemies without hitting allies with "friendly fire". The data-link is used for such things as communicating with EWACS, control craft and command ships. This is located on the dorsal bulge.

Retractable EC Antenna: This is part of the active stealth system and is located in the vernier tail and extends in gerwalk configuration (VF-1) or near the tail on others.

TACAN (Tactical Air Navigation Antenna): This is a navigation system used by military aircraft. It provides the pilot with bearing and distance (slant-range) to a ground or ship-borne station. It is located above the wing-glove stiffener.

UHF Antenna: Located in the nose, behind the radar.

VHF Antenna: Located in the vertical stabilizer.

Figure Alteration System - This system controls the transformation sequence of the variable fighter. While the main controls are part of the torso, they do extend into all servos to allow transformation.

Torso Servo "Nosecone Area"

Radar System - Performance and range will vary depending on the generation of the unit. This is determined by the Sensors Package rating. Most fighter aircraft operate in the X band (8-12 GHz).

Balance Control System - This aids in maintaining balance, both for walking and flying, for the gerwalk and battroid configurations.

Fire Control System (FCS) - This system calibrates the targeting system depending on the weapons to be fired. Older FCS cannot calibrate to some types of newer generation weapon systems. The FCS will vary depending on the generation of the unit.

All-Regime: This FCS is designed for all-purpose fighting, although it has limited air-to-ground capability (-1 WA when firing on the ground from flight).

Air-to-Air: This FCS is tailored for air superiority fighting.

Air-to-Ground: This FCS is tailored for attacking ground targets (strafing or bombing) while flying.

Air-to-Ship: This FCS is tailored for making attack runs against capital ships.

Head Servo

Hybrid Camera/TV Sensor - The head servo contains a hybrid sensor/TV package containing the following: Infrared camera (12,000m), Laser Aperture HD-TV Camera (variable zoom function depending on the generation of the unit, from 100x on the VF-1 to over 512x on the VF-25), Nightvision Camera, Ground Attack Strike Camera (high speed penetration and precision attacks on tactical targets at night and in adverse weather), Optics - TACS (Tactical Airborne Camera System; highly-sensitive super-telephotographic camera), Optics - Rear periscope (allows sight behind the unit; later integrated into the holographic cockpit system) and laser targeting system for the anti-missile head laser(s).

Targeting Laser - The head also contains a "markerlight" laser designator (+3 WA, Range 60) to aid in ranging weapons and to paint targets for laser-guided ordinance.

Loudspeaker - Projects the pilot's voice, or other internal sounds, up to 90 decibels.

Canopy Blast Shield

With the exception of the VF-22, VAB-2, VB-6 andVA-3, all variable fighters have a retractable shield that can extend over the fragile canopy for increased protection and for re-entry. This shield grants SP 3 with 3K of alpha class armor (DC 2) to all canopy hits while in use. While extended, the pilot must rely only on his control panels and suffers a -1 penalty to all skill rolls. This is included as part of the basic structure and does not cost any extra.

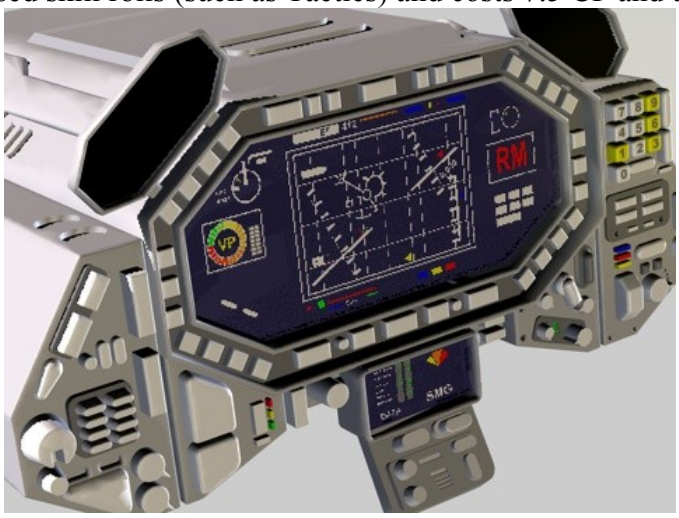
The VF-27 has an armored canopy standard, as the cyborg pilot does not need to visually see, and thus ignores the penalty. If the VF-27 cybernetic link is broken, the shield automatically jettisons to reveal the canopy.

In the case of the VF-0, VF-1 and VF-11, the canopy blast shield covers the cockpit which sits in the "abdomen" of the battroid. Hits to the cockpit use the blast shield protection instead of the torso armor.

Combat Computer

The entire cockpit canopy of a VF is a large HUD display, which allows the computer to display large amounts of data to the pilot and even highlight enemies and missile attacks with overlaid graphics. The combat computer tracks and identifies specific enemy targets, and has a database of known combatants stored in memory. Depending on the generation of the system, the type of FCS and what mode it is running in, the number of targets that it can simultaneously track varies.

The combat computer counts as a Target Analyzer and grants a +2 bonus on all applicable INT based skill rolls (such as Tactics) and costs 7.5 CP and takes 1 Space.



Autopilot

The auto-pilot can be programmed with a single destination or a complex flight plan involving multiple speeds, directions, and destinations. The onboard computer will alert the pilot when the fighter is near its destination, and can also be set to automatically signal when sensors detect objects near the mecha. The auto-pilot was designed with long intra-system space journeys in mind. Autopilot is a multiplier of x0.35, takes up 1 space, and has REF and Pilot, Navigation and Awareness/Notice 5 (1d10+10 on rolls). While active, it has 2 actions per round. The autopilot can be set to automatically fire HM type missiles, which have their own targeting system.

IDECM (Integrated Defensive Electronic Counter Measures)

The IDECM is a jamming system that uses a combination of onboard transmitters and the FOTD, if the vehicle is equipped with one, to deceive enemy radars and missile systems. The IDECM suite is intended to provide self-protection and increased survivability for tactical aircraft against radio frequency (RF) and infrared (IR) surface-to-air and air-to-air threats. It integrates specific electronic self protection systems on the host aircraft, such as the RWS (Radar Warning System, located on the tips of the wings) (can roughly calculate the direction and the distance of many different types of radar from various aircraft and missile types. The RWS can also display the status of the tracking aircraft's radar. It can differentiate between search radar, tracking radar, and missile-homing radar), the CMWS (Common Missile Warning System), the chaff/flare dispenser, the AN/ALE-55 FOTD launch controller/dispenser and the RFCM (Radio Frequency Counter Measures). Integration of these systems is intended to provide threat

system warning, threat missile detection/warning, and automatically initiates the most effective countermeasure response to increase survivability of the host aircraft against IR and RF threats. Available from 2004.

In Mekton this counts as a Radio/Radar Analyzer with the system splitting option; split between the torso and two wing servos effectively reduces it to 1 Space in the torso, and costs 8 CP.

Furthermore, unless it is turned off, the system will automatically trigger any flare/chaff/squib/smoke launchers or activate the appropriate ECM/ECCM system if available.

Airborne Control Craft System

This is a C^3 system (control, command, communications) used offensively to direct fighters to their target locations, and defensively to counter attacks. In air-to-air combat, the system can communicate with friendly aircraft, extending their sensor range and giving them added stealth since they no longer need their own active radar to detect threats. Control craft are primarily responsible for the management of asset activities within the operational environment based on the commands, direction, and guidance given by appropriate authority. Up to 36 fighters may be linked to a single AWACS fighter. Available from 2009.

In Mekton terms, this allows for any fighters linked to an AWACS/ELINT unit to use that unit's sensor package and range, while putting their own sensors on minimum (treat as backup package). Any enemy using radar/radio analyzer to track the sensors back will only detect the AWACS/ELINT unit until the other fighter are in the enemy's own sensor range. Furthermore, since most units with this system have a dedicated RIO (or multiple), the linked fighters gain the benefits of *multiple crew* as if the linked units were a single mecha so long as they are linked.

This costs 5 CP and takes 1 Space in the unit equipped with it.

Pulse Doppler Radar

Is a 4D radar system capable of detecting both target 3D location as well as measuring radial velocity (range-rate). It uses the Doppler effect to avoid overloading computers and operators as well as to reduce power consumption. RF energy returning from airborne objects and spacecraft are combined for successive target reflections returning from a dozen or more transmit pulses, and these are integrated using Pulse-Doppler signal processing.

Pulse-Doppler radar is crucial for military applications called look-down/shoot-down, which allows small fast-moving objects to be detected near terrain and weather. The purpose is to detect targets while eliminating hostile environmental influences, such as reflections from weather, the surface of the earth and biological objects like birds, and electronic interference, which hide reflected signals from aircraft but which move much slower than aircraft. A secondary purpose is to to reduce transmit power while achieving acceptable performance for improved safety and stealthy radar.

Pulse-Doppler radar for aircraft detection has two modes: Scan & Track. *Scan* mode involves frequency filtering, amplitude thresholding, and ambiguity resolution. Once a reflection has been detected and resolved, the pulse-Doppler radar transitions to tracking mode. *Track mode* works like a phase-locked loop, where Doppler velocity is

compared with the range movement on successive scans. Lock indicates the difference between the two measurements is below a threshold, which can only occur with an object that satisfies Newtonian mechanics. Other types of electronic signals cannot produce a lock.
[Mekton stats to be determined]

AWG-20 RADAR

Is a mechanically scanned X-Band Pulse Doppler radar system designed for the F-14 Tomcat and installed on the initial VFs. It is an anti-air, anti-ground, anti-space, anti-alien, all-weather multi-mode airborne radar system. It is also capable of guiding several missiles at the same time to target. The antenna dish is a 91 cm wide planar array, with integrated IFF antennas. There are several search and tracking modes available, such as Track-While-Scan (TWS), Range-While-Search (RWS), Pulse-Doppler Single-Target Track (PDSTT), Jam Angle Track (JAT), gun director, and raid assessment (which enables the operator to expand the region centered on a single tracked target, permitting radar separation of closely spaced targets). Air-to-surface modes include Doppler beam sharpened sector and patch mapping, medium range synthetic aperture radar, fixed and moving ground target track and sea surface search.
VF Used: VF-0, VF-1

Range: 280km lock-on for Mekton sized objects with 370km search range

Height: 24,385m to small moving objects on or near the ground not obscured by foliage

Frequency: 8-12 GHz

Search Cone: 120° x 120° (forward hemisphere)

TWS (Track While Scan) mode: track 24 targets, engage up to 6 simultaneously

ACM (Air Combat Maneuvers) mode: track 18 targets

AGM (Air-to-Ground Maneuvers) mode: track 10 targets

[treat this as HS sensors since VF-1 has 960km range?]

APG-995 Phased Array Radar

An all-weather multimode airborne radar system composed of 5,000 pieces. This X band (8 to 12 GHz) pulse-Doppler radar system is designed for both air-to-air and air-to-surface missions. For air-to-air operations they incorporate a variety of search, track and track-while-scan modes to give the pilot a complete look-down/shoot-down capability. Air-to-surface modes include Doppler beam sharpened sector and patch mapping, medium range synthetic aperture radar, fixed and moving ground target track and sea surface search. The radar provides a high level of aircrew situational awareness. The beam of the AESA radar provides nearly instantaneous track updates and multi-target tracking capability.

The APG-995 features an entirely solid-state antenna construction, which improves reliability and lowers the cost compared to a traditional radar system. The APG-995 enables aircrews to simultaneously guide several missiles to several targets widely spaced in azimuth, elevation or range. It has a higher processor throughput, greater memory capacity, bandwidth, frequency agility, higher analogue/digital sampling rates, improved reliability and ease maintenance.
VF-Used: VF-4

Range: 375km lock-on for Mekton sized objects
Height: 24,385m to small moving objects on or near the ground not obscured by foliage
Frequency: 8-12 GHz
Search Cone: 120° x 120° (forward hemisphere)
TWS (Track While Scan) mode: track 24 targets, engage up to 6 simultaneously
ACM (Air Combat Maneuvers) mode: track 30 targets
AGM (Air-to-Ground Maneuvers) mode: track 10 targets
[Mekton stats to be determined]

APG-997 Phased Array Radar

An improved APG-995 radar for the VF-1 Plus upgrade project. Mainly improved in air-to-ground and high-altitude detection abilities.
VF-Used: VF-1 Plus
Range: 375km lock-on for Mekton sized objects
Height: 24,755m to small moving objects on or near the ground not obscured by foliage
Frequency: 8-12 GHz
Search Cone: 120° x 120° (forward hemisphere)
TWS (Track While Scan) mode: track 24 targets, engage up to 6 simultaneously
ACM (Air Combat Maneuvers) mode: track 30 targets
AGM (Air-to-Ground Maneuvers) mode: track 12 targets
[Mekton stats to be determined]

Other VF Radar

VF-9: FCS is capable of tracking and identifying specific enemy targets, up to 30 targets on the ground and 90 targets in the air, while simultaneously devising and executing fire control solutions on up to 4 ground targets, or 12 aerial targets. The FCS has a database of over 2,000 images stored in memory.

VF-11: FCS is capable of tracking and identifying specific enemy targets, up to 25 targets on the ground and 250 targets in the air, while simultaneously devising and executing fire control solutions on up to 6 ground targets, or 20 aerial targets. The FCS has a database of over 10,000 images stored in memory.

VF-17: FCS designed for both air-to-air (fighter) and air-to-ground/ship (attacker) purposes. Can track 250 targets simultaneously, and has a database of over 10,000 images stored in memory.

VF-19: FCS is capable of tracking and identifying specific enemy targets, up to 24 targets on the ground and 250 targets in the air, while simultaneously devising and executing fire control solutions on up to 10 ground targets, or 30 aerial targets. The FCS has a database of over 10,000 images stored in memory.

VF-25/75: AA/AS/SF-06 Multi-Purpose Sensor (fighter/gerwalk) can detect targets from10-50,000m in size up to 750km away. Battroid radar (head mount) can detect targets from 15-16,200m in size up to 75km away.
VF-171:
Range: 280km lock-on for Mekton sized objects with 370km search range

Height: 24,385m to small moving objects on or near the ground not obscured by foliage

Frequency: 8-12 GHz

Search Cone: 120° x 120° (forward hemisphere)

Wide-Range Search mode: uses LADAR and IR

TWS (Track While Scan) mode: track ? targets, engage up to ? simultaneously

ACM (Air Combat Maneuvers) mode: track 60 targets

AGM (Air-to-Ground Maneuvers) mode: track 20 targets

AW (Anti-Warship) mode: designed to use the RMS-6 missiles

Active Electronically Scanned Array (AESA)

A type of phased array radar whose transmitter and receiver functions are composed of numerous small solid-state transmit/receive modules (TRMs). [Phased array radar is an array of antennas in which the relative phases of the respective signals feeding the antennas are varied in such a way that the effective radiation pattern of the array is reinforced in a desired direction and suppressed in undesired directions.]

AESAs aim their "beam" by broadcasting radio energy that interfere constructively at certain angles in front of the antenna. They improve on the older passive electronically scanned radars by spreading their broadcasts out across a band of frequencies, which makes it very difficult to detect over background noise. AESAs allow ships and aircraft to broadcast powerful radar signals while still remaining stealthy.

AESA are able to do this because each module broadcasts its own independent signal. This allows the AESA to produce numerous "sub-beams" and actively "paint" a much larger number of targets. Additionally, the solid-state transmitters are able to broadcast effectively at a much wider range of frequencies, giving AESAs the ability to change their operating frequency with every pulse sent out. AESAs can also produce beams that consist of many different frequencies at once, using post-processing of the combined signal from a number of TRMs to re-create a display as if there was a single powerful beam being sent.

<u>Advantages are</u>:

Low Probability of Intercept: since the AESA can change its frequency with every pulse, and generally does so using a pseudo-random sequence. Traditional RWRs are essentially useless against AESA radars.

High jamming resistance: traditionally, jammers have operated by determining the operating frequency of the radar and then broadcasting a signal on it to confuse the receiver as to which is the "real" pulse and which is the jammer's. This technique works as long as the radar system cannot easily change its operating frequency. Since an AESA changes its operating frequency with every pulse, and spreads the frequencies across a wide band even in a single pulse, jammers are much less effective. Although it is possible to send out broadband white noise against all the possible frequencies, this means the amount of energy being sent at any one frequency is much lower, reducing its effectiveness. In fact, AESAs can then be switched to a receive-only mode, and use these powerful jamming signals instead to track its source, something that required a separate receiver in older platforms.

Generate Far More Data: than traditional radar systems, which can only receive data periodically, as they can broadcast continually while still have a very low chance of

being detected, they are so much more useful in receiving signals from targets. Which greatly improves overall system effectiveness.

High reliability: since each module operates independently of the others, single failures have little effect on the operation of the system as a whole.

Improved Stealthiness: replacing a mechanically scanned array with a fixed AESA mount helps reduce an aircraft's overall radar cross-section (RCS). But some designs forgo this advantage in order to add the limits of mechanically scanning to the limits of electronic scanning and provide a larger angle of coverage.

Other advantages: since each element is a powerful radio receiver, active arrays have many roles besides traditional radar. One use is to dedicate several of the elements to reception of common radar signals, eliminating the need for a separate radar warning receiver. The same basic concept can be used to provide traditional radio support, and with some elements also broadcasting, form a very high bandwidth data link.
[Mekton stats to be determined]

Holographic Display Cockpit

In 2039 during Project Supernova, the new generation variable fighters presented the holographic cockpit. The cockpit layout has monitors below and around the pilot in addition to the HUD cockpit dome. In flight, these monitors display what is below and behind the aircraft, giving the pilot a tremendous field of view that, at the time, was unparalleled by any other variable craft.

In Mekton terms, this counts as a virtual cockpit control system, granting +33% MP and has a cost multiplier of x0.05.

QFS-06 Fold Detector

A sensor that comprehensively detects fold waves, as well as such things as gravitational fields, magnetic fields, and infra-red rays. Various radar, sensors, avionics and so on are enhanced more than existing craft, and they have evolved in the VF-25, too.

This counts as an advanced sensor package, spotting radar (phased array) and MgH Class sensors. The system has 8 Kills, takes 2 Spaces and costs 55 CP.

BCS (Brain Control System) & BDI (Brain Direct Imaging)

BCS – This revolutionary and experimental system is one of the most unique abilities of the YF-21. The BCS system allows a disciplined pilot to link his mind with the onboard computer of the mecha, and issue control commands to it at the speed of thought. This allows the YF-21 to move with human-like reflexes and respond with human- like speed. Feedback for the system is transmitted back to the pilot using the brain-direct imaging (BDI) system (see below), providing an interactive control loop that literally makes the mecha a part of the pilot.

The disadvantage of the system is that it requires a fair amount of concentration to use. If the pilot of the YF-21 is suddenly startled or disturbed, he may lose control of the mecha and be unable to regain it until he calms himself down. It requires a fairly dramatic event to startle the pilot sufficiently, such as being physically wounded, seeing a comrade killed in front of him, or (in Chief Bowman's case) being suddenly confronted with a despised enemy and suffering a flashback. If startled, the pilot must make a Difficult COOL + Concentrate check (DV set by the GM) to keep control of the plane. If he fails, the BCS fails and the YF-21 will freeze. In order to regain control of the BCS, the pilot must calm himself sufficiently, which requires another successful roll. NOTE: the GM may impose penalties to the above rolls if the pilot is going through a very traumatic experience while flying the YF-21.

Another disadvantage of the BCS is that when un-calibrated to a specific user, the system has a tendency to pick up stray thoughts from the pilot and act upon them without his permission. A particularly nasty example of this happened during the Project Super Nova tests when Chief Bowman imagined slamming pilot Isamu Dyson's VF-11 into the ground, and the BCS picked up and acted on that idle thought. When properly calibrated there is no danger of this occurring, but when an un-calibrated system is being used by a pilot during game play, the GM should roll against the player's COOL whenever the player makes an idle remark about what he would like to do with the YF-21 (even if he was just mentioning it in jest). Furthermore, the BCS was calibrated for a human brain; Zentraedi or Zolans trying to use this (even half or quarter blooded) suffer a -2 penalty to the control rolls. If the GM's roll fails the player's COOL test, the YF-21 will do *exactly* what the player mentioned, regardless of the consequences.

The cockpit of the YF-21 is equipped with a backup set of standard aircraft controls in case the pilot loses control of the BCS and cannot re-establish contact. Initial versions of the BCS were calibrated specifically for human brain waves, which led to problems when the system was used by non-human pilots such as Chief Bowman. Zentraedi or other alien pilots using a non-calibrated BCS system receive a -3 penalty to their rolls to keep control of the system.

In Mekton terms, this feeds the information from any sensors directly to the pilot's brain, granting a +2 Initiative bonus. Furthermore, the pilot can disable the safety limiters on the sensory feed to give the pilot even more superior control over his VF, at a price. While the limiter is out, the pilot gains a +1 MV and WA/DA bonus and gains an extra action per round. The VF will also be able to use its full speed regardless of its altitude, but the VF will take 1K damage each round (to Torso and each Wing) from atmospheric friction if it exceeds safe velocity. The drawback is that the pilot suffers 1 temporary point of COOL damage for every round it is used (and any possible G-force damage).

BDI – This prototype system, along with the BCS, allows the pilot of the YF-21 to essentially control the mecha with his thoughts. The BDI system is extremely important to thought control, as it provides the pilot with visual and tactile feedback from the mecha, including things such as balance and force feedback. The BDI essentially makes HUD (heads-up display) and HMD (head mounted display) technology obsolete since instead of overlaying a display with computer-generated graphics the pilot can receive direct sensory input with computer analysis and highlights directly into his brain.

The BDI system does have a drawback, however. Human (and Zentraedi) brains were not designed to accept this type of intense input, and use of the BDI system can lead to stress, fatigue, and headaches. Frequent use of the BDI can even lead to stress-induced trauma-like symptoms manifesting themselves such as sleeplessness, frequent migraines, shaky hands, cold sweats, and short tempers/emotional problems. After each week of frequent use of the BDI system, the pilot must make an Average COOL check or the character will begin to exhibit one of the above symptoms (GMs choice). The base medical officer can prescribe drugs to suppress the symptoms, but the only way for the pilot to be cured is to stop using the BDI system. It is not known what long-term use of the BDI system without breaks will do to a pilot.

NOTE: Although the cockpit of the YF-21 prototype 2 does NOT contain any windows except a top-mounted radome (the BDI makes windows unnecessary, theoretically), a backup display monitor is included for the pilot in the event of BDI system failure. This monitor, while acceptable as an emergency backup, is not well designed for a combat fighter, and being forced to rely solely on it imposes a -2 penalty to attack and piloting rolls by the pilot.

In Mekton terms, the combination of BDI/BSC is the Thought Control system (page 78 Mekton Zeta Plus). It is a multiplier of x0.5. This system grants a +1 WA on all weapons, +2 MV (can go above 0), and +67% MP. Furthermore, it allows the pilot to use his INT in place of REF for piloting rolls. For every 3K of internal damage the VF suffers, the pilot takes 1 Hit of damage to his head from feedback.

VF-27 Note – The VF-27 uses both the BCS and BDI, however due to almost 20 years of technological advancement since the YF-21 and the use of cybernetic pilots, the system does not have the same flaws; it instead requires a full body replacement cyborg with a slave link.

Anti-G Mechanisms

These are various methods of either reducing the G load on the pilot or allowing the pilot to handled higher G loads. The Inertial Dampening System, EX-Gear and

Inertial Store Converter are technically anti-G mechanisms, but are sufficiently advanced to have their own entries (see below).

Seat Angle and Vital Point Stimulation

This is a non-OTEC device used on the VF-0 series. Through optimization of the angle of the seat and the body current stimulant system (so called vital point stimulation), the pilot can handle 20-30% more G-force than normal (10.8 to 11.7 G). It sees use up through the VF-14.

This allows the pilot to withstand +2 G load to his normal limit and increases acceleration per turn to 13 MA. It costs 6 CP and shares space with the cockpit (increase to 7 CP for dual-seat).

Biological Anti-G Boosting System

This system is found on the VF-15 series. This system stimulates the human body with laser, electromagnetic pulse, infrared, and other means to momentarily activate metabolic functions against stress.

This allows the pilot to withstand +4 G load to his normal limit and increases acceleration per turn to 15 MA. It costs 16 CP and shares space with the cockpit (increase to 17 CP for dual-seat).

Mobile G-Reducing Seat

This system is used in the VF-19 series. The mobile seat reduces horizontal G when rolling. From this description, this reduction is most applicable to instantaneous G loads, and has a reduced functionality with sustained G loads. Thus, it protects the pilot during high G maneuvers but not from basic straight-line acceleration.

When making high-speed maneuvers, such as QN-69 or Cobra Rise, it allows the pilot to withstand +4 G load to his normal limit, but only +2 G load while making normal acceleration. It also increases the acceleration per turn to 15 MA. It costs 17 CP and shares space with the cockpit (increase to 18 CP for dual-seat).

Inertial Dampening System

This system was reverse engineered from the Quimeliquola Temporary Gravity and Inertia Vector Control System out of the Queadlunn-Rau power armor by General Galaxy for use in their variable fighters, and is a less effective version of the ISC below. Work on the system was not completed until it's incorporation into the YF-21/VF-22 and was later used in the VF-27 series. The system manages to counter 90% or more of any inertia from a mecha, allowing the pilot to make high-speed maneuvering without increase in G-force.

In Mekton terms, this system counts as ACE +66%. <should increase G load tolerance by +6 G kupo

* However, even tenacious Zentraedi pilots suffer from G's during high-maneuverability, and to the extent of making a VF remarkably high-powered, it isn't possible to say that it was an effective device.

Inertial Store Converter

Developed with the YF-24, and adopted in the VF-25, VF-27 and VF-29, it has the nickname "inertial buffer"; an inertia buffer that stores inertia and includes a conversion system. Essentially, inertia, to a degree, is distributed where the mechanism attempts to store and convert the amount of inertia which the airframe and pilot cannot

withstand into temporary dimensional distortion field energy; the excessive inertia that exceeds the endurance limit of the airframe and human body is overcome by gradually reducing it on the airframe and the pilot over time.

What this does is allows the pilot to withstand high-G maneuvers that would normally cause a pilot to black out or suffer internal injuries. This allows the pilot and mecha to withstand up to 27.5G for up to 120 seconds (12 turns) at a time. The ISC will engage automatically when the combat computer detects G-forces of 12G or higher. Each turn of use requires one turn to dissipate the energy, and it cannot dissipate energy on the same turn that it gains more. This has a cost multiplier of x0.2.

The ISC requires high purity fold quartz found in the larger types of Vajra to construct and use.

Pilot can withstand +10 G load to his normal limit. Acceleration of the variable fighter drops from +12 MA per turn to +11 MA per turn.

EX-Gear System

VF Used: VF-171EX, YF-24, VF-25, VF-27, VF-29, VB-6

In 2059 when the VF-25 was being tested, there was also the introduction of the EX Gear. This linear frame provides the pilot flight capability and some armor when out of his variable fighter. Furthermore, it allows a lesser version of the virtual control system and can slave control his variable fighter up to 5 hexes (250m) away. This is a 10 CP additive system and takes no slots. A variable fighter with this option cannot be piloted without an EX Suit, as the suit itself contains the HOTAS and thruster controls.

Furthermore, by use of the EX Suit, pilots can withstand the performance of AVF units that are known for breaking pilots (reduces the BOD requirement to 4).

In Mekton this counts as a fusion of virtual and reflex control (still includes the holographic cockpit display above), treated as +50% MP and increases the G load tolerance of the pilot by +8 G. It has a cost multiplier of x0.7.

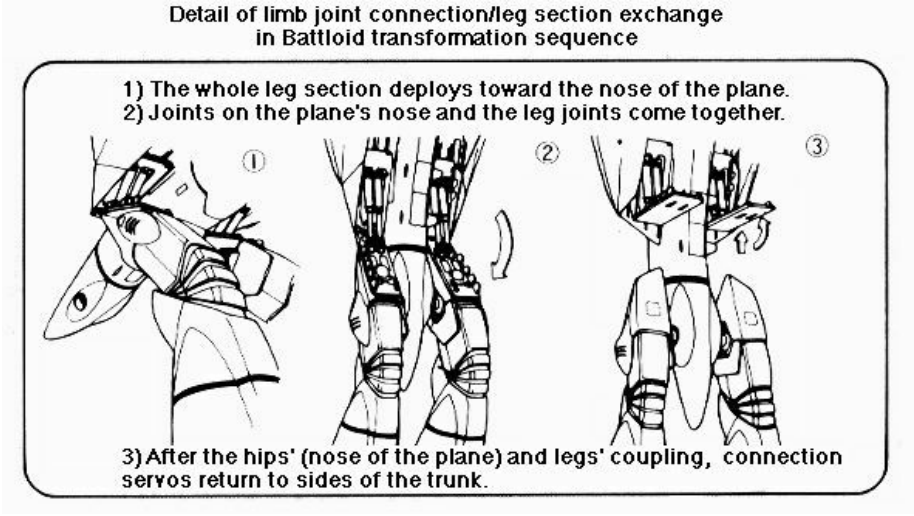
* This represents *just* the interface ability of the EX suit; that is to say the modifications to the cockpit to allow the EX suit to work. The actual EX suit stats are listed in Chapter 5 - UN Equipment.

Structural/Armor Systems

Variable Fighter Technology

In the Mekton rulebook, it is stated that a mecha costing 500 CP is supposed to be a unique and very powerful mech. A single Variable Fighter can be around 300-400 points, making it powerful by Mekton standards, but was mass-produced for the average soldier (a 100-200 CP mecha). Some of the later model variable fighters cost upwards of 1000 CP or more. However, variable fighters are said to be much more expensive than destroids to manufacture. This is due to their transformable nature.

Early generation variable fighters use a transformation system called ANIGRAS. This is replaced with the YF-19 and later with ARIEL system.


Detail of limb joint connection/leg section exchange
in Battloid transformation sequence
1) The whole leg section deploys toward the nose of the plane.
2) Joints on the plane's nose and the leg joints come together.
①
②
③
3) After the hips' (nose of the plane) and legs' coupling, connection servos return to sides of the trunk.

VF-1

Variable Fighter: Cost multiplier x0.8

At base, a variable fighter by definition has fighter mode (x0.3), hybrid gerwalk (x0.35), conditional movement; GES in battroid/gerwalk only (-x0.1) and weapons networking (x0.1) for a base cost multiplier of x0.8. There are some variable fighter types that exclude one form or another, but in general most follow this guideline.

Space Variable Fighter: Cost multiplier x0.45; no gerwalk mode

This package is for variable fighters that omit the hybrid/gerwalk form due to its limited use in space.

Advanced Variable Fighter: Cost multiplier x0.9; all options above plus efficient transformation

The VF-25, VF-27, VF-29 (and likely later models to come) have an advanced transformation system in which the components of the variable fighter are shifted via electromagnetic field. This means the parts do not slide across each other, eliminating friction, and thus, quicker transformation times. This allows one additional transformation per turn.

There are also the advantages of such things as a reduction in breakdowns and an increase in maintainability, because the complex mechanical mechanisms have disappeared.

VTOL Capability: Cost multiplier +x0.05

Some later variable fighters have VTOL capability in fighter configuration as well as the standard for battroid and gerwalk. Just add this cost to the above package choice.

Self Destruct

This is a system installed in all UN mecha and ships that is used to prevent UN technology from falling into the wrong hands – primarily those of the Anti-UN forces. The self destruct causes the thermonuclear powerplant to overload and destroy all systems within the frame, and reduce the structure to slag. This system takes up no spaces, costs 5 CP, and has a timer that can be set anywhere from instant to 1 hour. This will instantly kill anyone inside the mecha, and causes 4K damage to all hexes immediately surrounding the one the exploding mecha is in (considered Blast 1). All servos, armor and internal systems are reduced to 0K. At the GM's discretion, components attached on the exterior of the armor may or may not survive.

SW-AG Energy Armor System

By use of Overtechnology, variable fighters use surplus power to ensure that the VF's moving parts stay locked together in battroid mode, making the variable fighter as solid as any conventional design and as strong as a tank. This keeps parts such as the tail wings from flying out of place when the front of the variable fighter is hit as well as strengthening the armor from within.

SW-AG

In Mekton terms, as long as the variable fighter has power, it increases the effective SP of all armor in battroid configuration by 2. Thus SP 5 armor counts as SP 6. When the natural armor SP is reduced to 1 (effectively 3), it does not count the effective increase for armor ablation (goes from effectively 3 to 0). Or to put it more simply, add 2 to the actual remaining SP of the armor for calculating penetration. This system offers no benefit in fighter or gerwalk configurations. It effectively works like the +2 SP gained from tank transformation. This system has a cost multiplier of x0.05.

Stage II SW-AG

This later development, used by the VF-171EX, VF-25, VF-27 and VF-29, grants the SP bonus in all modes. This version has a x0.1 cost multiplier.

Anti-Optical Weapon Vaporizing Armor

A function added to the passive stealth coating substance spread on the surface of the airframe is to vaporize instantaneously when exposed to high energy, thereby diffusing the beam. It sees use on the VF-171, VF-25, VF-27 and VF-29.

This functions as the beam refraction option under stealth in Mekton Zeta Plus. It reduces damage from energy weapons by 1K before applying armor SP. It can reduce damage to 0K, but not below (no healing effect). It has a cost multiplier of x0.1.

Malleable Wing Structure

By use of Overtechnology free-transforming materials, the variable fighter is able to "flex" the wing and airfoil, changing the cross section. This grants a +2 bonus to all piloting and dodge rolls while in fighter or gerwalk configuration. If the wing suffers more than 50% loss of its structure (armor and/or servo reduced below half value) then the bonus is lost.

This has a cost multiplier of x0.05. The system requires use of the BDI/BCS or a cybernetic pilot link to get the full use; without either of these, the bonus is reduced to +1 for manual control.

By the late 2050's, this system is called ACTIVE (Advanced Control Technology for Integrated Valkryries), and is planned to be built into all future AVF units.

Environmentals

Almost all variable fighters have desert, space, and re-entry protection (x0.2 cost multiplier). Some of the AVF units may have more environmental protection than this basic package. All VF series can withstand underwater immersion for a few minutes at a time, although only a select few will have the underwater protection.

Hardpoints

A hardpoint is defined as a quick-change weapon mount (1 Space, 3 CP). Each wing/body hardpoint can carry a payload of missiles, with the amount varying by missile type. Any VF carrying “high maneuverability micro missiles” refers to the standard micro missile listed (+1 WA) unless otherwise specified. See the missile chart below for more missile information. The HM missile types are reserved for special missions, not stock VF armament. As noted above, most variable fighters must fire or drop their hardpoint payloads before transforming to battroid form. Only the VF-0, VF-1, VF-25 and VF-27 can keep their missiles mounted on their wing hardpoints in battroid mode. Since the SV-51 was based on the plans for the VF-0, it follows this exception as well (see Anti-UN Mecha).

Add up the Kills worth of equipment mounted on the hardpoints and divide by 20 to find the B-Mod of the equipment while mounted.

Standard Options

Unless specified by the individual model type, all variable fighters have a liftwire, escape pod, anti-theft codelock, storage module, spotlights x2, nightsight, thermal imager, infrared, homing signal, and 1 torso weapon mount for carrying their gun pod in fighter configuration. All UN mecha also carry portable survival gear including a 2 man tent, cooking gear, radio, 1 week of rations and water, anti-radiation pills, a couple of signal flares and a first aid kit. (8 CP total, the escape pod and storage module each take 1 Space in the torso servo)

Tricycle Landing Gear & Arresting Hook

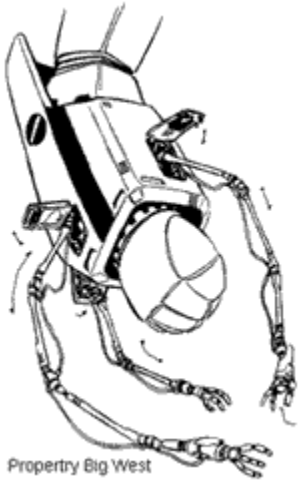
Although variable fighters are listed with no ground movement speed in fighter configuration, they can move 10m per round on relatively flat/smooth surfaces with their powered landing gears. If they engage their thrusters, they can move faster (no more than MA 2 (36 kph) or they risk breaking the landing gears).

The arresting hook is for use when landing on an aircraft carrier, to prevent the fighter from overshooting and falling off the opposite end. The arresting hook is used on the VF-0, VF-1 and VF-4, and is discontinued in later models.

"Magic Hands" Micromanipulators

The VF-1 has a set of 3 human-scale micromanipulators that can extend out for fine precision work such as working computer consoles or doing repairs. The system also

includes a hybrid sensor system to allow the pilot to see what the micromanipulators are doing. The hybrid sensor can function as backup sensors in the event that the main visual sensors in the head servo are lost.



The entire system costs 3 CP and takes up 2 Spaces in the right arm. It is only seen in the VF-1 series. Each micromanipulator has 20 SDP with SP 6 armor (human scale), and the hybrid sensor has 1K.

Defensive / Stealth Systems

Flare/Chaff/Smoke Dispenser

Combination chaff, flare and smoke dischargers, useable in all modes of a VF. When used, they fire a burst of flares, exploding chaff containers or a cloud of smoke per use. The IDECM automatically releases the appropriate countermeasure when a missile (or missile volley) is about to hit. As detailed below with missile information, each type is considered to be a limited anti-missile ECM, capable of confusing particular types of missiles.

Flare - These are used to confuse heat-seeking missiles by generating spots of heat that confuse the missile into thinking they are the fighter's thrusters.

Chaff - These are highly reflective metallic pieces that are used to confuse radar-guided missiles into thinking they are the fighter's fuselage.

Smoke - This extremely dense smokescreen is used to blind optical-tracking missiles.

The standard payload is 10 uses of each in each leg/engine nacelle. Each use of the appropriate type of countermissile measure will impose a -5 hit penalty to the appropriate type of missile. Thus ejecting flares will impose -5 WA to heat-seeking missiles.

AN/ALE-55 FOTD (Fiber-Optic Towed Decoy)

The FOTD is a supplement traditional radar jamming equipment to provide protection against modern radar-guided missiles. The device is towed while transmitting a signal like that of a threat radar. It's jamming can be used across a broad frequency range to defeat advanced RF threats. The AN/ALE-55 defeats RF threats by delivering three layers of defense:

1) The FOTD is used to emit jamming that suppress an enemy's radar's ability to acquire and track the target.

2) If the craft is being successful target tracked, the system analyzes the radar emissions and determines optimum jamming techniques to break aircraft track. If more than one radar threat is detected, the system can respond with simultaneous transmission of multiple jamming techniques.

3) If an RF missile is launched, the FOTD can break the missile's track of the aircraft or lure the missile away from the target aircraft by itself becoming the target. The missile will detect and lock onto the decoy rather than on the aircraft. This is achieved by making the decoy's radiated signal stronger than that of the aircraft.

In Mekton this is a missile ECM system (50km range) in a small pod towed by a reinforced fiber optic cable (100m). It may be reeled back into the variable fighter to be reused so long as it is not destroyed. Available from 2004.

Anti-Ballistic "Bulletproof" Combat Shield

This becomes a standard on many variable fighters from the VF-11 and later. It consists of a heavy plate of armor mounted on the left forearm via a weapon mount, and is stronger than the variable fighter's normal armor. They do not benefit from the SW-AG armor.

For those variable fighters with a pinpoint barrier system, the barrier is generated over the anti-ballistic shield by the combat computer by default, stacking the defenses.
Generation 1 - MS Class alpha armor (SP 7, DC 2, 7 Kills), DA -1, has 2 binder slots for GU ammunition clips, 13.75 CP
Generation 2 - HS Class beta armor (SP 8, DC 4, 8 Kills), DA -1, has 2 binder slots for GU ammunition clips, 18.56 CP

Pinpoint Barriers

Attacks are nullified by using a space-time distortion, based on the larger model developed onboard the SDF-1 Macross. Airframes from the YF-19 and later have been equipped with a PPB for VFs. The PPB can only be used in battroid form because in other modes, the majority of the engine power is used for other purposes. For that reason, the implication is that it is often used to protect the manipulators doing such things as hand-to-hand combat (fist fighting), and is typically placed over the bulletproof shield on the left arm.

The pinpoint barrier is defined as follows:

PBS-03F – Reactive Shield, "Surge", SP 8, DA -0, 2 Spaces, 2 turn reset, unlimited duration, 8 Kills, 107.2 CP

The barrier will be knocked out for 2 turns if it is hit by an attack inflicting 9K to 15K, and the system will fuse if the barrier takes a hit of 16K or more. The barrier will increase hand-to-hand damage of the hand (or combat knife) by +8K and will be treated as an energy melee weapon (-4 SP).

Pinpoint barriers sound completely invulnerable, however they do have some flaws to keep in mind. The barrier itself is a 3m diameter disc, which obviously cannot shield the entire mecha. To stop an attack, the pilot must make a successful parry roll (see main rulebook). If he fails to parry, the attack hits the mecha normally (the GM may rule that the first damage goes to the left arm since that is typically where the shield is

generated over). The shield cannot fully protect against missiles or ballistics with a blast radius larger than 1m, nor against energy weapons with the wide angle or mega beam traits. The mecha still suffers half damage when parrying any of these attacks.

Pinpoint barriers only work while in battroid configuration due to the power requirements. Later models, such as the VF-25 and VF-27 have sufficient power that the pinpoint barrier works in all configurations (projects in front of the nose in fighter/gerwalk configurations by default).

Active Stealth

Active stealth has been used in variable fighters since the VF-0 in 2008. It wasn't until 2039 during Project Supernova that the 3rd generation active stealth was able to produce reliable results.

When the VF takes damage to the Torso servo, there is a 1-3 chance on a d10 that the system fails and cannot restart until the VF undergoes repairs.

An active stealth system only affects the mecha itself. It does not affect anything else, so any missiles/projectiles it fires will appear out of nowhere on sensors. For example, a fighter with active stealth can be detected during atmospheric reentry by the shockwave of its passage, which shows up on radar. A fighter travelling near the ground at supersonic speed kicks up debris as it passes, especially over snow or water.

Active stealth is most effective when attacking a known position. The fighters that use it can fly so fast that the first warning defenders have will be impacting missiles, followed by the sonic boom of the passing fighter. On the down side, it does very little good when fighting defensively, particularly in a dogfight.

1st Generation Active Stealth

Early generation active stealth used by the VF-0, VF-1, VF-4 and VF-9. While it cannot make the fighter completely invisible to sensors, it does impose a -3 penalty to all sensor rolls and missile lock rolls against the fighter. This is a x0.1 cost multiplier.

2nd Generation Active Stealth

Mid generation active stealth used by the VF-11, VF-14 and VF-17. While it cannot make the fighter completely invisible to sensors, it does impose a -6 penalty to all sensor rolls and missile lock rolls against the fighter. This is a x0.2 cost multiplier.

3rd Generation Active Stealth

Current generation active stealth used by the VF-19, VF-22, VF-25, VF-27, VF-29, VB-6 and VF-171. This system counts as active cloak, stealth, combat cloak, pulse refraction, magnetic refraction, and fire control, with a small discount for not actually making the fighter invisible to visual detection (x1.05 cost multiplier).

This all makes the variable fighter invisible to spotting radar, magnetic lens, mecha/starship sensors and advanced sensor packages. Most fighters with the active stealth also sport the low visibility paint scheme (see below). Missiles have a -10 penalty to lock rolls.

Passive Stealth

The VF-17, VF-14, VAB-2 and VF-9 have passive stealth. This is a combination of radar absorbing/reflective materials that make the VF harder to detect. As defined in Mekton Zeta Plus, page 75 – passive stealth makes the mecha unable to be detected by a

spotting radar and is nearly silent, making it unable to be tracked with recon systems. Passive stealth has a x0.2 cost multiplier.
*Only the VF-17 is listed as passive stealth, even though General Galaxy specializes it.

Low Visibility Paint Scheme

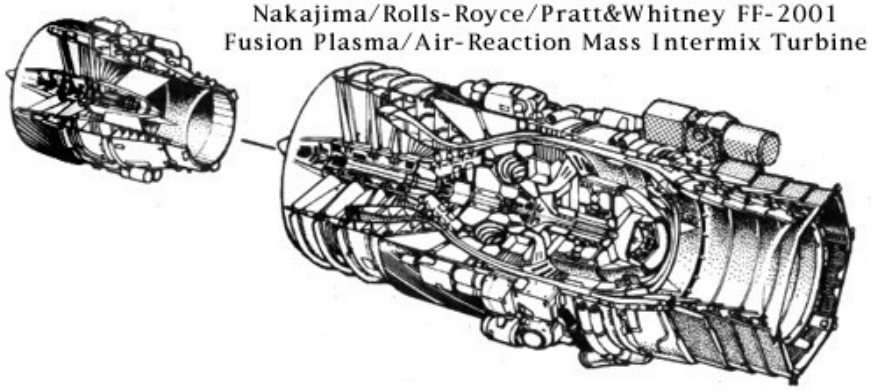
Space is largely black, so one way to make a fighter harder to see in space is to paint is black or dark blue/grey. For every hex of distance beyond the first, there is a -2 penalty to visual checks to see a fighter with such a paint scheme. Paint schemes do not affect chances of detection from sensors of any kind, only looking out the window and hoping to see the opponent. This assumes that the fighter isn't in front of a large bright object or leaving nice bright trails from the thrusters. A paint scheme is a cosmetic alteration and only costs 1 CP (ignore cost multipliers).

Powerplant & Thruster Systems

Powerplant & Thrusters

Almost all variable fighters have a powerplant split between the right and left legs. The VF-22, VF-27, VF-29 and VAB-2 are the main notable exceptions. The legs also usually contain the bulk of the thrusters, with verniers in the back of the torso and in the legs to help keep the battroid upright during flight. Another unique feature is that the thrusters also work as GES in battroid and gerwalk configuration (see Mekton Zeta Plus, pg 61) without having to buy both systems, allowing the mecha to hover along both water and earth.

The VAB-2 has the bulk of its thrusters mounted in the armored shoulders rather than it's legs, while the VF-22 thrusters are mostly in the back. The VF-27 and VF-29 have thrusters in the legs and wings.



< VF-1 engine

Additionally, the cost for "hot" engines is not a fair tradeoff for a 400% increased chance of the mecha exploding on an engine hit. In Macross, both "hot" and "cold" engines give a MP bonus, but "hot" engines cost less because they are more dangerous. The table includes bio-energy and power cell engines although there is no record of them being used anywhere in the Macross universe (but are used in other sourcebooks). All Macross mecha use "hot" fusion engines unless specifically stated in their profile.

* Undercharged engines have a -1 penalty to MV, ground MA and MP.
* Overcharged grant +1 MV +1 ground MA and +33% MP.
* Supercharged grant +2 MV, +2 ground MA and +67% MP.

The chart below shows the cost multiplier by powerplant type.

Powerplant Type	Undercharged	Standard	Overcharged	Supercharged
Combustion [cold]	-0.2	0	0.1	0.2
Combustion [hot]	-0.3	-0.1	0	0.1
Power Cell [cold]	-0.17	0	0.13	0.26
Power Cell [hot]	-0.27	-0.1	0.03	0.16
Fusion [cold]	-0.15	0	0.15	0.3
Fusion [hot]	-0.2	-0.1	0.05	0.2
Bio-Energy [cold]	-0.1	0	0.23	0.45
Bio-Energy [hot]	-0.2	0.1	0.13	0.35

Power Cell (revised rules)

Power cells should be rated by how long they can run the mecha in question under "combat power" rating. If the mecha is switched to "standby" mode, this will double the duration. If the mecha is switched to "emergency standby" mode, the duration increases to the next step; i.e. minutes to hours, hours to days, days to weeks, etc.

In standby mode, the mecha cannot move more than 1/2 of any MA and can use no weapons, shields, overboosters, active stealth, or similar high power-consuming systems. In emergency standby mode, the mecha can only move 1 MA regardless of system and everything else is shut off save life support and sensors/communications.

Mecha with power absorbing armor can convert 1 Kill of energy damage into 1 turn of recharge.

A standard 1:1 Mekton scale power cell costs 0.05 CP for a basic standard charge cell and has a weight of 25kg (0.0025 ton). The first power cell takes no Spaces as it is assumed part of the powerplant. Additional power cells take up half a Space each.

Example, an Evangelion has a 2 minute emergency battery, so it can last for up to 120 turns in combat before powering down. If the pilot turns to standby mode, this will last up to 4 minutes. If the pilot turns to emergency standby mode, this will increase to 2 hours.

Backup Powerplant

The mecha has a second powerplant, paying full normal cost. Any powerplant except for Hyper may be chosen. If the mecha's primary powerplant is destroyed or disabled (and the mecha doesn't explode) then the mecha will automatically engage the backup powerplant. Further powerplant hits apply to the backup.

Example: An Evangelion's primary power source is Tethered, with a 2-minute Power Cell backup if that gets cut. Another example, most Destroids in Macross have a primary fusion powerplant and a backup liquid fuel combustion engine.

Afterburners

Afterburners dump fuel into the exhaust rather than the mixing/reaction chamber. This raises the thrust, but is far less efficient. Kicking in the afterburners on Thrusters increases thrust by 50%, but uses 4 times as much fuel. Cost for Thrusters w/Afterburners is 0.45 CP per Ton per MA (0.3 CP without).

Transatmospheric Capability

Many of the VF units, particularly later models, are listed as being able to escape the earth's gravity and attain orbit without the need for FAST packs. In Mekton, escape velocity is defined as MA 109. Unfortunately, most VFs cannot attain this speed even in fighter configuration. Mekton Zeta Plus (page 88) gives information for transatmospheric ability. This will allow a VF to reach orbit.

Transat Ability x0.15

This system diverts all excess power from the VF's powerplant into the primary thrusters to allow the mecha to reach escape velocity. This system may only be used in fighter configuration, and prevents the use of any energy weapons, active stealth or PPB systems while being used. Unlike in Mekton, this draws on the mecha's nuclear powerplant instead of having a single use fuel-based overbooster. Transatmospheric ability cannot be used if the variable fighter is missing a thruster block (typically the loss of one leg). If the VF has more than MA 109 in fighter configuration with missing thruster blocks (some have more than 2), it can still leave an earth-like planet's gravity.

Standard Weapons

Hughes Series Gunpods

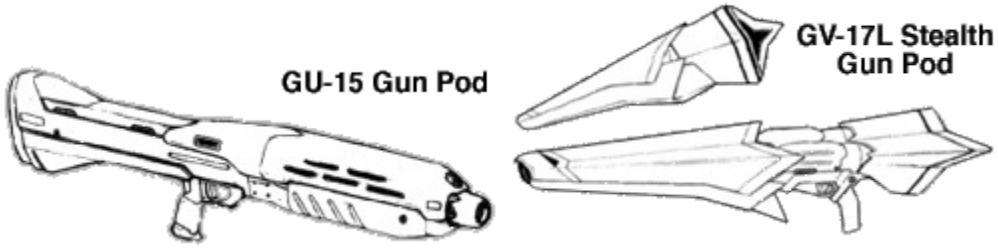
The various VF series are equipped with multifunctional gunpods that are almost always useable in all three modes. Some gunpods are clip-fed, capable of quickly changing out their ordinance, as the battle requires. Other gunpods carry a larger payload of ammunition internally, giving them extended combat time but requires proper loading machinery to reload. All gunpods are armed with AHEAD ammunition (Advanced High Explosive Armor Defeating).

In Mekton terms, gunpods are phalanx-variable, have +1 WA, and have AP (armor piercing) ammunition as standard. Some of the advanced VF units have tracer rounds mixed in with their standard ammunition. Gunpods are sturdy enough to serve as a club weapon once their ammunition is depleted, adding 1K to hand damage and suffers a -1 WA penalty. All gunpods have an effective range of 5 hexes (250m). Ammunition adds 2K to a gunpod if stored internally, or 1K as clip.

In Mekton terms, the gunpod itself is a LW class pod with 2K / SP 2 armor, and the gun, targeting sensor and ammunition clip port or ammunition hopper are contained inside.

A VF must be in battroid or gerwalk mode to change the ammo clip for clip-fed gunpods. Under CP is the cost for a weapon with no ammunition. Ammunition cost is listed below the chart; multiply the cost times the ammo on the list for the final cost.

Like with missiles (below), ammunition should not have the CP increased for the features of the gunpod itself. Ammunition will only consider the damage, range and ammo traits (AP/Tracer/MDE), not the weapon's BV, WA and so forth.



The GU-8 was designed before the arrival of the ASS-1 (pre-OTEC) and uses APSSDS (Armor Piercing Spin Stabilized Discarding Sabot) and HESH (High Explosive Squash Head) ammunition. This particular gunpod was used by pre-OTEC destroids, but I chose to list it here as well because it could be used by variable fighters as well; and it is a GU series gunpod. The MC-17A and MC-17C are made by General Galaxy, but follow normal gunpod rules so they are included here.

** Ammunition payloads are fudged quite a bit from their official stats. The GU-11 carries 200 rounds of 55mm AP ammunition, and fires at 1,200 rounds per minute at full power. Thus it can empty its entire payload in *one turn*. Most pilots are usually more frugal with their ammunition, being trained not to waist, and will fire in controlled bursts of 5 to 10 rounds per action. This extends the ammunition a good amount, leaving a GU-11 with only 40 or 20 bursts. With the burst fire rules, assume a standard action burst is 5 rounds, an extended burst is 10 rounds and a full burst is 20 rounds. Ammunition payloads are thus calculated by the standard burst values.**

Gunpod	DMG	Ammo	BV	Notes	VF Used	CP
GU-8	8d10 H	--	3	55mm, Pre-OTEC	Destroids	5
GU-9	3K	--	3	55mm	0	16.6
GU-11	3K	40	3	55mm	1, 4	16.6
GU-11 Mini	3K	--	3	55mm	Dragon Kung Fu	16.6
GU-11L	3K	--	3	55mm	Mighty Bird	16.6
GU-11S	3K	--	3	55mm	Deep Diver	16.6
GU-11 Enhanced	3K	--	3	55mm	3000	16.6
GU-11X	3K	-	3	55mm, C	1 Plus	16.6
GU-11XM	3K	-	3	55mm, +2 WA	VF-1JX	??
GU-12	2K	-	5	30mm, C	9, 14	??
GU-13	2K	-	6	30mm, C	11	??
*Bayonet	3K	-	-	AP, Mated, +3K		+3
GU-14	3K	-	4	55mm, C	5000	??
GU-15	3K	-	5	55mm, C, T	19	??
GU-17A	4K	-	5	58mm, T	25	??
GV-17L	3K	-	5	55mm, T	21, 22	??
MC-17A / MC-17C	2K	-	7	40mm, C, T	17, 171	??
*Laser mod	15K	1	-	Range 12, +3 WA		13.1

Cost per burst: multiply the appropriate cost by the ammo payload
30mm AP: 0.08 CP
40mm AP: 0.08 CP
40mm AP/Tracer: 0.24 CP
40mm AP/Tracer/MDE: 0.28 CP
55mm AP: 0.12 CP
55mm AP/Tracer: 0.36 CP
58mm AP/Tracer: 0.48 CP
58mm AP/Tracer/MDE: 0.58 CP

Paint/Training: 0.01 CP regardless of caliber

Notes

* The GU-11 mini, S and L variants had no designation. I added these to keep them in line with named models.

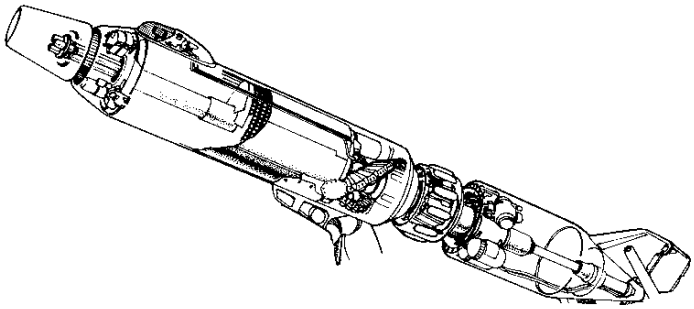
* The VF-17's gunpod is produced by General Galaxy rather than Hughs, but is included here for ease of reference. The gunpod is rendered useless after firing the laser mod (the ammunition feed and firing components are ejected). Furthermore, the VF-17's gunpod stock splits and folds back alongside the rest of the weapon to allow it to be stored in the leg compartment. The VF-171 uses the MC-17C model, but is identical other than minor changes to match the changes of the VF-171's legs. The laser module does not have the All Purpose trait.

* The GU-17A used by the VF-25 does not have an ammunition count listed. Based on the fact it does not appear to be clip-fed, I presume it has a large payload like other similar models. It also uses a retractable cover to allow for air cooling of the barrels; if the optional rules for weapon heating are used, the GU-17A disperses an additional point of heat.

* The VF-3000 is listed with a GU Enhanced gunpod, which I am presuming to be a GU-11 with increased ammunition capacity.

* Anti-Vajra ammunition uses MDE technology and ignores their ability to adapt to damage. It does not come into existence until 2059. This type always has tracer ammunition mixed in, and gains the standard +1 WA for tracers.

C – Clip Fed weapon, may be reloaded (takes 1 action to change clips)
T – Tracer rounds, +1 WA (not included in weapon profiles) 1 in 5 rounds is a tracer



Gunpod Cost Breakdown
LW class pod + LW armor = 4 CP
Gun cost equal to damage = 2-4 CP
Range is usually 100% or 75% of Mekton range = x1.0 or x0.88
+1 WA = x1.5 CP
BV 3 to 7 = BV3 x2, BV4 x2.5, BV5 x3, BV6 x3.5, BV7 x4
Phalanx-Variable = x1.4 CP

Example: GU-11 is base damage 3K and Range 5, with BV3. Starting cost is 3. So this is 3 x 1.5 (+1 WA) x 2.0 (BV3) x 1.4 (phalanx variable). Thus: 3 x 1.5 = 4.5 x 2 = 9 x 1.4 = 12.6. Then add 4 CP for the pod itself for a total cost of 16.6 CP.

Ammo Cost Breakdown
Gun cost for damage
Range multiplier
Cost per shot/burst = x0.01
Armor Piercing ammo = x4
Tracer rounds = x3
MDE rounds = x1.2
Shot/Burst count = x shots

Example: Going with the GU-11 above, it has a payload of 60 bursts. The base cost for 3K damage is 3 CP. The base range for 3K is 5 hexes. So the math goes like this: 3 CP x0.01 (per burst) x4 (AP). Thus: 3 x0.01 = 0.03 x4 = 0.12 CP per burst. A full payload is 40 bursts, so 0.12 x40 = 4.8 CP

The final cost for a loaded GU-11 is 16.6 + 4.8 = 21.4 CP

Energy Weapons

Most VF series have anywhere from one to four head mounted anti-aircraft lasers, with the number indicating approximate rank. Many of the VF series also incorporated energy weapons in the main body, wings or arms of the mecha for additional firepower to insure the pilot has at least decent weapon with unlimited ammunition (assuming the powerplant is running). All VF energy weapons have normal Kills and take 1 Space.

Below are a list of some commonly used energy weapons found on variable fighters.

Weapon	Dmg	Range	BV	CP	Notes
EP-4 Particle Beam	5K	5	-		
Erlikon AAB-7B	3K	5	-		
LA-3 Pulse Laser	2K	4	3		
Mauler ROV-20	1K	4	-	2.7	Phalanx Variable
Mauler ROV-22	1K	4	2		Phalanx Variable
Mauler ROV-25	2K	5	3		
Mauler ROV-127C	4K	5	3		Phalanx Variable
Mauler BC-27A	3K	5	-		
Mauler LPG-30/AA	2K	4	3		Phalanx Variable
Mauler REB-22	3K	5	3		
Mauler REB-23	3K	5	4		
Mauler REB-30G	4K	5	3		

LA-3	VF-1-R	head laser
Mauler ROV-20	VF-1	head laser
	VF-27	head laser
Mauler ROV-22	VF-3000	head laser
Mauler ROV-25	VF-9	shoulder laser
	VF-25	hip laser
	VF-27	hip laser
Mauler ROV-127C	VF-25	head laser
ROV = mm		
Mauler BC-27A	VF-14	medium-bore beam gun

Mauler LPG-30/AA	VA-110 head laser
Mauler REB-22 beam cannon	VF-17 torso laser
Mauler REB-23 beam cannon	VF-19 wing laser
EP-4Beam Cannon	VF-4 nacelle laser
AA Laser	VF-11 head laser
AA Laser	VF-17 head laser
AA Laser	VF-19 head laser
AA Laser	VF-5000 head laser
Erlikon AAB-7B beam cannon	VF-17 arm laser
	VF-22 head laser

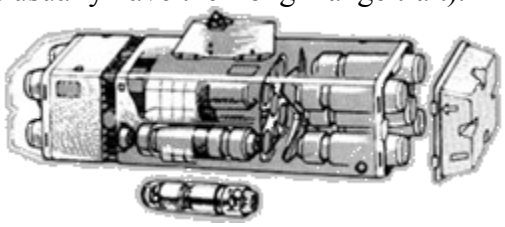
Missiles

Missiles can be mounted on wing/body hardpoints or internal missile bays. Internal missile bays will list exactly how many missiles and what type it can store. Each hardpoint can mount a pod of 15 micro-missiles, 12 short-range missiles, 3 intermediate-range missiles or 1-2 long-range missiles. High-maneuverability missiles (HM) are slightly larger, and thus each hardpoint can only hold 10 micro, 6 short-range or 2 intermediate-range. Each hardpoint can carry a payload of 12 "dumb" bombs. With the exception of "dumb" bombs, all missiles are considered to be "smart". That is, they can differentiate between friend and foe by their IFF signal, thus avoiding killing allies when a large swarm of missiles is fired.

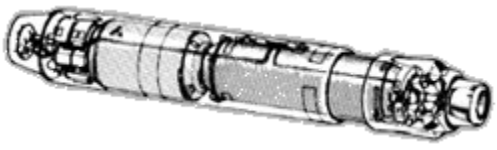
Note that while the anime never showed use of fire retardant, gas, flare or smoke missiles, I have included them from the Palladium version of the game because it makes sense that the UN would have such types of non-lethal warheads; particularly for civil duty models. Flare missiles did show up in Macross II, however.

Later eras of Macross include a type of countermissile type called the squib. The squib creates a $1km^3$ area of ECM that disrupts all radar within the area, disrupting radar-guided missiles. This affects imposes a -10 WA penalty to all radar-guided missiles in the area, but keep in mind that the ECM (and the related ECCM) will broadcast where the deployer is located. (When a big chunk of the radar return gets distorted, one knows roughly where the ECM emitting craft is and the most likely place the enemy forces will be.)

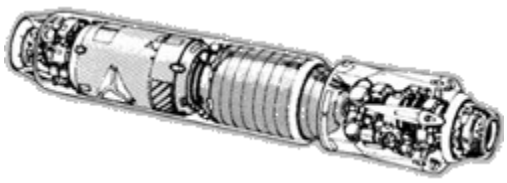
Micromissiles have a 32 range maximum (1.6 km), SRM have up to 100 range (5 km), IRM have up to 2000 range maximum (100 km), and LRM have anything beyond (and usually have the Long-Range trait).

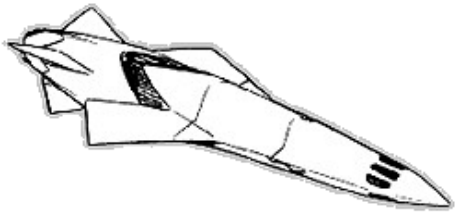


UUM7 Micromissile Pod

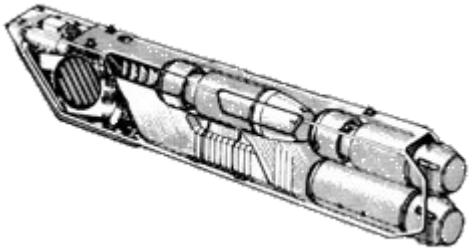


Intermediate-Range Missile



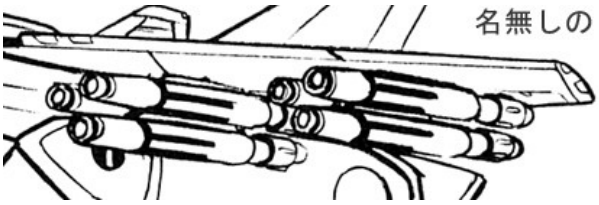


Long-Range Missile



Short-Range Missiles

High Maneuverability IRM



UUM10 IRM Hardpoint Rack

Hardpoint Missile Racks

These are launcher containers for various missiles and can be mounted on any VF wing-mounted hardpoints. Each container has 1K structure with LW armor (2K, SP 2). Racks must be ejected before atmospheric reentry, except for the UUM7 Mk II.

UUM7 Micromissile Pod – Holds 15 micromissiles, can fire in volleys of up to 5
UUM7 Mk II Micromissile Pod – Holds 24 micromissiles, can fire in volleys of up to 8
UUM8 Rocket Pod – Holds 12 bombs, can fire in volleys of up to 12
UUM9 SRM Rack – Holds 10 short range missiles, can fire in volleys of up to 5
UUM10 IRM Rack – Holds 3 intermediate-range missiles, can fire in volleys of up to 3
UUM11 LRM Rack – Holds 1-2 long range missiles (LRM, HMLRM, Firebird or Silencer)
UUM12 HMMM Pod – Holds 10 HM micromissiles, can fire in volleys of up to 5
UUM13 HMSRM Pod – Holds 6 HM SRMs, can fire in volleys of up to 3
UUM14 HMIRM Pod – Holds 2 HM IRMs, can fire in volleys of up to 2
VF-0 Missile Pod – Holds 8 IRM, can fire in volleys of up to 4
Hexagonal MM Pod – Developed for the VF-171, holds 18 micromissiles, can fire volleys of up to 6

Internal Missile Pallets

Some variable fighters have internal missile pallets, typically in the legs/engine nacelles. This allows the missiles to be protected by the better armor of the variable fighter, and they need not be ejected for re-entry.

Bifors AAM-01S: 6 IRM
Bifors BML-02S: 12 micromissile including HMMM
Bifors BML-04D: ?? micromissile
Bifors BMM-24: 6 micromissile (BMM-24 is missile type?)
Little Rock: 6 HMIRM or 24 HMMM
Stonewell/Royce B-6 Internal Pallet:
Stonewell/Royce B-7 Internal Pallet: 12 micromissile, 6 SRM or 3 bombs
Stonewell/Royce B-11A Internal Pallet: 2 IRM or 1 LRM/Reaction/Bomb
Stonewell/Royce B-21A Internal Pallet: 1 LRM/Reaction

Bifors AAM-01S	VF-14
Bifors BML-02S	VF-171, VF-22, VF-29
Bifors BML-04D	VF-27

Bifors ???	VF-19 (12x micro or HMMM)
Bifors ???	YF-19 (9x IRM or 1x LRM)
B-21A	VF-22 (exclusive)
Little Rock Pallet	VF-19 (6x HMIRM or 24x HMMM)
???	VF-17 (4x SRM)

This chart only covers "standard" missiles. Any specialty missiles such as reaction warheads will be listed below under optional systems.

Missile Type	WA	Range	DMG	Kills	Cost	Notes
Raytheon-Erlikon GH-30B MM	+1	32	3	3	2.1	CMV
HM Micro Missile	+3	32	4	3	18	Seek 2, Skill 20+
AMM-1B Short Range Missile	+1	64	5	2	5.85	CMV
HM Short Range Missile	+3	70	6	2	37.8	Seek 2, Skill 20+
Raytheon-Bifors AIM-130A IRM	+1	1200	7	2	27.3	
HM Intermediate Range Missile	+3	1600	8	1	120	Seek 2, Skill 20+
Long Range Missile	+2	127^2	12	1	30.6	Blast 2, LR
Firebird Heavy Missile	+2	127^2	15	1	45	Blast 3, LR
Silencer Anti-Radiation Missile	+2	150^2	10	1	75	LR
CBM Heavy Cluster Missile	+1	64	7	1	17	Blast 1
Diamondback G Cluster Missile	+1	1200	7	1	35	Blast 2
Diamondback D Nuclear Missile	+2	1200	8	2	500	Nuclear, Blast 3
Diamondback E AD Missile	+1	1200	7	1	25	AP
Erlikon GA-100 Crusher	+1	64	6		10	GBP, AP
Erlikon GH-32 Grenade Crusher	+1	32	3		2	GBP, CMV
Remmington H-22T Hand Grenade	+0	throw	5		1	GBP, Blast 1
MK-82 LDGB Conventional Bomb	+0	drop	10	4	5	Blast 3
Buster Bomb	+0	1200	12	1	15	Blast 3
Flare Missile	+0	32	N/A		0.75	Blast 5, 3 rounds
Smoke Missile	+0	32	N/A		1.2	Blast 2, 3 rounds
Tear Gas Missile	+0	32	N/A		0.5	Blast 1
Knockout Gas Missile	+0	32	N/A		0.5	Blast 1
Fire Retardant Foam Missile	+0	32	N/A		0.5	Blast 1
Squib	+0	24	N/A		5.5	Missile ECM 10, Blast 20

Notes

Cost – per missile

Kills – how much damage a single hardpoint's worth can withstand before detonating, not including the missile rack itself, also used to determine B-Mod of the load.

GBP – these were only used in the GBP system for the VF-1 Valkyrie and VF-0 Phoenix

CMV – Counter-Missile Variable; can be fired against other missiles with no penalty

LR – Long-Range capable (maximum range 16,129 hexes / 800 km)

Hi-Maneuverability Missiles (HM) – once fired these will chase their target for 3 rounds and can dodge attacks aimed at them (Dodge 1d10+20, 2 dodges per round).

Flare – these missiles erupt into a super bright ball of light that imposes a -5 penalty to all rolls involving sight for 3 rounds

Smoke – this missile releases a dense cloud of smoke

Smoke, Flare, Foam and Gas missiles can be either micro-missiles or short-range missiles, but they have the same stats regardless.

CBM Cluster Missile – this is an anti-personnel weapon

Diamondback – these missiles require advanced targeting computers, which are not found on any of the VF-1 series except the -X and -R models, the VF-4 or the VA-3. The -G model is anti-personnel. These are all considered IRMs.

Silencer – this missile is Seek 2, Skill 14+ against any mecha or ships that have a nuclear powerplant.
Buster Bomb counts as a LRM for purpose of hardpoint mounts.

UN Spacy Variable Fighters

VF-0 Series: VF-0A, VF-0B, VF-0D, VF-0S, VAL-0B, VF-0S Standoff
VF-1 Series: VF-1A, VF-1D, VF-1J, VF-1S, VT-1, VF-1C, VE-1, VF-1 Strike, VF-1 Super, VF-1SOL, VF-1JX, VF-1X Plus, VF-1X++, VEFR-1, VF-1AR, VF-1JR, VF-1SR, VF-1AR Plus, VF-1JR Plus, VF-1SR Plus
VF-2 Series: VF-X-2
VF-3 Series: VF-X-3
VF-3000 Series: VF-3000
VF-4 Series: VF-X-4, VF-4A, VF-4B, VF-4C, VF-4D, VF-4G, VF-4S, VF-4SL, VF-4SP, VF-4ST
VF-5 Series: VF-5A, VF-5E, VF-5F
VF-5000 Series: VF-5000B, VF-5000G, VF-5000T-G
VF-6 Series: VF-6
VF-7 Series: VF-7
VF-9 Series: VF-9, VF-9E
VF-10 Series: VF-10A
VF-11 Series: VF-11A, VF-11B, VF-11C, VF-11C Interceptor, VF-11D, VF-11D Jammingbird, VF-11D Thunder Focus, VF-11E, VF-11F, VF-11G, VF-11MAXL, VF-11P
VF-14 Series: VF-14, VA-14
VF-15 Series: VF-15
VF-16 Series: VF-16
VF-17 Series: VF-17D, VF-17S, VF-17T, VF-171, RVF-171, VB-171, VF-171EX, RVF-171EX
VF-19 Series: YF-19, VF-19A, VF-19ACTIVE, VF-19B, VF-19C, VF-19D, VF-19E, VF-19EF, VF-19F, VF-19S, VF-19P
VF-21 Series: YF-21
VF-22 Series: VF-22, VF-22HG, VF-22S
VF-24 Series: YF-24
VF-25 Series: YF-25, VF-25A, VF-25F, VF-25G, VF-25S, RVF-25
VF-27 Series: VF-27β, VF-27γ, VF-27-5
VF-29 Series: YF-29
VAB Series: VAB-2, VA-3, VA-14, VB-6
VF-O Series: VF-O-1A
VU Series: Air Variable Mecha, Space Variable Mecha, Ground Variable Mecha
VZ Series: Variable Glaug, VGP-1/VA-110 Neo-Glaug
VF-X Series: SPD-1A, SPD-1S, VF-3000, VF-3000B, VA-X-3, VF-5, V-BR-2, VFS-2, VF-X-7, VF-X-10, VF-T-11, VF-X-11, SW-XA 1, SW-XA II, XB-70, AVF-1, AVB-1
Sound Force Series: VF-11MAXL, VF-17T, VF-19F, VF-11D Jammingbird
Vanquish Custom: VF-0 Custom "Zeak", VF-11B Nothung, VF-11B Shenandaoh, VF-19A Brauhitsu Special, SV-52γ Oryol, VF-17D Song Cuu Long, VF-11B Thunder Bell

III, VF-11B Lacrimosa, VF-11B/X Sister Valkyrie, VF-11B Custom El Camino Real, VF-11B "803", VF-11B Miyabi, VF-11B/MAXL Red Curtain, VF-11B Rev-Splash
Unmanned Series: QVF-11, Neo Glaug

Designation Information
VF – Variable Fighter series: standard all purpose dogfighter/interceptor.
VE – Variable Electronic Warfare series: equipped with ECM/ECCM capabilities.
VA – Variable Attacker series: designed for ground assaults similar to the destroids.
VB – Variable Bomber series: designed for heavy saturation bombing and assault.
YF – Prototype Variable Fighter: assigned to the first unit of the line.
AVF – Advanced Variable Fighter: applied to certain units such as the VF-19.
AVB – Advanced Variable Bomber
SW – Stealth Wing
QVF – Drone Variable Fighter

Designations can be combined, such as with the VAB-2 which had a dual role as an attacker and bomber.

VF-0 Series

The VF-0 Phoenix series consisted of the first transformable fighter. It is very similar to the well-known VF-1 except that it did not have the thermonuclear turbine engines, because they had not been fully developed yet. As such, it used a high-grade jet fuel. The engines for it could still put out almost as much power as the VF-1 came to use. Also, it was more rounded than the more angular frame of the VF-1 series. After their mission was finished, remaining VF-0 units were pulled back behind enemy lines or sent to test centers and forgotten. The recently discovered documents (about 2048) brought new light to the UN Spacy's first variable fighter. Records indicate that approximately 24 VF-0A, 2 VF-0B, 2 VF-0D and 4 VF-0S units were built.

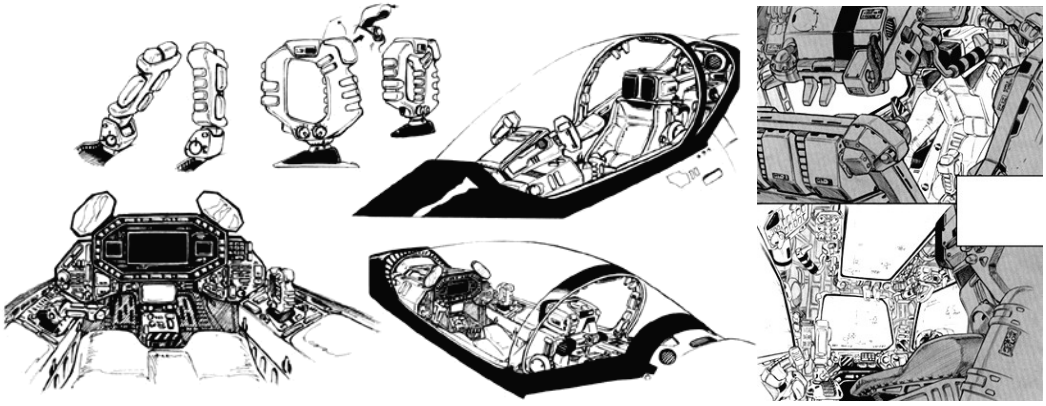
The VF-0 Phoenix has an attainable service ceiling of 25,000m (26,500m for VF-0D). The VF-0 can also function underwater to 20m depth for up to 5 minutes.

The VF-0S also has a "standoff" variant with additional missile pods attached. The VAL-0B (variable airborne laser) is a variant with the oversized head unit mounted on the top instead of undersize, and appears to not have hands.

VF-1 Series

The VF-1 Valkyrie series is one of the most highly manufactured variable fighters, with numerous variants. All of the VF-1 series uses the same basic chassis. The VF-1A is the basic model, having a single head mounted laser. The VF-1J is assigned to squad leaders, having 2 head mounted lasers. The VF-1D, also designated VT-1D, is two-seat version of the VF-1J designed for training pilots. The VF-1S with its 4 head lasers is only assigned to ace pilots and squadron commanders. For reconnaissance missions, there is the VE-1 Elintseeker and VERF-1, equipped with advanced sensors and extended communications. The VF-1 Super Valkyrie and VF-1S Strike Valkyrie are designations for standard FAST pack configurations (sometimes seen as VF-1AS and VF-1SS, respectively). In 2011 there was a trial production run of the VF-1SOL, with a beam weapon gunpod rather than ballistics. For nonmilitary use there is also the VT-1C, which was built with no weapons systems and sold as a civilian and construction model.

In the year 2025, the remaining VF-1s (approximately 1800 units) were upgraded to VF-1X Plus, with increased armor and stronger engines.



In the year 2036 (possibly early 2030's) all remaining units were upgraded to VF-1R. Shinsei Industry hastily developed this refit kit, during the height of the Neld Fleet Crisis, in an attempt to give VF-1X units a better chance against their Neld Fleet opponents. The VF-1R refit included connection points for a new booster module as well as a number of minor improvements to the targeting system. Theoretically, the VF-1R has equal firepower to a VF-4G heavy fighter, but in actual combat the refit showed relatively little gain in performance over the VF-1X design and the refit was never widely produced. As with the VF-1X, distinct VF-1AR, VF-1JR, and VF-1SR versions exist based on the type of turret mounted. VF-1R type fighters are only deployed with the Earth Defense Force. VF-1R fighters can be differentiated from their VF-1X cousins by the appearance of their FAST packs, as well as from the new streamlined turrets they are equipped with. Curiously, the VF-1JR carries only a single laser cannon, as opposed to all other J-types which have two. In 2047 Shinsei Industries upgraded a handful of VF-1X Plus units into "Double Plus" by reducing their armor weight and mounting more powerful engines.

Because the overland close-range battle destroid Spartan loss factor is rather large, the overland close-range battle type Valkyrie was planned to supplement the destroids. Using the Valkyrie in a Destroid role was opposed by many, but the result of the test runs were very good, showed the efficiency even exceeding the Spartan in some circumstances. However there was no time for the training period of the pilots, in addition, the number of essential Valkyrie machines was reduced due to losses in military action, therefore authentic conversions were abandoned. For this role, the light "dragon kung-fu" and heavy "mighty bird" systems were built.

Variants were also made to increase space performance limits. The "Gabriel" was a modification with extra thruster packs mounted on hardpoints, while the "deep diver" had custom made FAST packs for long-range space usage. Both of these lead to the development of actual FAST packs. The VF-1 can function underwater to 100m depth for up to 15 minutes. In space, the VF-1 can sustain a maximum of +7G acceleration.

The VF-1 was produced from 2007 to 2015 with 6000 units being built, with the VF-1X upgrade for the remaining 30% of them in 2025. The first 24 VF-1 were hastily refitted in 2008 as VF-0 units.

* Alternate Information: The VF-1 Valkyrie was built from 2006 to 2013 producing 5,459 VF-1 variable fighters (VF-1A = 5,093, VF-1D = 85, VF-1J = 49, VF-1S = 30, VF-1G = 12, VE-1 = 122, VT-1 = 68; published in Variable Fighter Master File VF-1 Valkyrie Vol. 1, 2009)

VF-X-2 Series

Little is known of this model since the base designing it was lost when Boddole Zer's fleet annihilated the earth. No records survived. Based on the designs for the VF-3 through VF-7, I assume that it would be a variation of the VF-1 chassis type (unless it was another designation for the V-BR-2 series).

VF-X-3 Series

Development began as a proposed replacement for the VF-1 Valkyrie, competing with the VF-X-4. Chief designer was the VF-1 Valkyrie's principal designer Colonel Chris J. Takatoku. Development proceeded with the basic design and production of a full-size mockup. The project used Earth's Grand Cannon IV as the main base. Since the VF-X-3 was developed primarily from the VF-1 Valkyrie's designs, it was clearly demonstrated to have maneuverability exceeding that of the VF-X-4. Project ended at the developmental stage because the production systems were lost in 2010 with the destruction of the Grand Cannon IV and the disappearance of Colonel Chris J. Takatoku. Project data and the mockup were also lost, and only a number of photographs and one part contracted out to a space plant exists now.

The VF-1 Valkyrie series proved to be clearly inadequate against enemy battle pods as a "space superiority fighter." Equipping it with augmentative parts compensated this, but the military pressed for the development of a "complete space fighter-interceptor." The project was drafted on the Macross as it was traveling through space.

The resulting prototype, VF-X-3, was seen as a significant step above the VF-1 series. The armor was doubled, overall power output was increased three times, and the statistical firepower was increased 32 times over the standard VF-1. However, since there was no inertial control system sufficient for it, the burden on the pilot increased, and the project was canceled due to numerous accidents that occurred. A unique feature of this series is the lack of the VF-1's gerwalk mode. This is because the gerwalk mode has little useful value in space. Armament was listed as: two liquid-cooled electrically-charged particle beam launchers, two three-grenade grenade racks, seven infrared laser systems, two micro-missile phalanxes and six missile bays.

The VF-X-3 was designed for the Macross: Remember Me game for the PC. This version should not be confused with another VF-X-3 that is listed with the VF-X section below (both versions underwent design simultaneously without either design crew knowing of the other's work).

VF-3000 Series

The VF-3000 is a remodeled version of the Stonewell-Bellcom VF-1 Valkyrie. Intended to be licensed by independent national factions within the United Nations with proprietary technologies incorporated by each. Because the design had a stretched elongated body compared to the VF-1 Valkyrie, the joints tended to slip slightly. As a result, only a few units were produced. Stonewell-Bellcom (the division formed from the

later merger of Stonewell and Bellcom) and Shinnakasu developed the VF-5000 from the VF-3000 design, and produced the VF-5000 after the companies' aerospace development divisions merged to form Shinsei Industry. The VF-3000 was intended as an atmosphere superiority fighter.

The VF-3000 was a mecha originally started by Macross mecha designer Shoji Kawamori, but was dropped and then later used as the basis of the VF-5000 series. Later, Kawamori finished the design for background filler.

VF-4 Series

Shortly after Space War I, the VF-4 was developed as the first new variable fighter. The VF-4 Lightning III prototype (VF-X-4 Siren) used the front cockpit/fuselage of the VF-1 series (30% of it is VF-1 components), but has a new body design with more powerful engines and more weapons. The original prototype attempted a design to allow the unit to reenter an atmosphere without having to jettison the FAST packs.

The VF-4A is the first production model, with the -B dual seat trainer. The VF-4C is the atmospheric specific model. The VF-4D is the -C model designed for the UN Navy, being designed for missile strikes and interception rather than dogfighting. The VF-4S is designed for the UN Marines, with additional protections against salt water corrosion.

The VF-4SL is a variant that has no arms, and cannot transform into battroid, and the gerwalk is armless. This variant is referred to as the "VF-4 lightly equipped" type. It was popular with early colony fleets but was phased out in favor of the VF-11 Thunderbolt and VF-14 Vampire.

The final unit, designated VF-4G, was built from completely new parts. The VF-4G saw a 10-year production run, from 2012 to 2022, with 8245 units made. The VF-4 is the first variable fighter with transatmospheric flight capability. There are also -SP (super) and -ST (striker) versions.

Note that the Lightning III and Siren are actually the same mecha, but due to the timing of the releases of Macross 2012 and the Macross Eternal Love Song game, they ended up with two separate names for the same unit. The Siren designation also seems to have links to the Macross II anime.

VF-5 Series

In 2009, the UN Spacy began development of a variable fighter that would be optimized for use in space. Northrop designed the VF-5 Tiger as a lightweight space fighter that would complement UN Spacy's main fighter, the VF-4 Lightning III. It was developed to be lower in cost than other variable fighters, allowing for production on a more numerous scale. The VF-5 had its first flight in 2013 and began mass production in 2015. It served in the Sol system, aboard several of the early Megaroad colonization missions and on numerous colony worlds. Manufacturing ceased in 2023 after almost a decade of production, when both the Lightning and the Tiger were phased out by the VF-11 Thunderbolt. Its lower cost allowed it to be purchased in large numbers on colony worlds, and it continued to be used by several Megaroad fleets.

The VF-5 is another officially created mecha with no information other than it was produced from 2015 to 2023 as a low cost VF for colony planets, and was designed to land in water.

VF-5000 Series

Shinnakasu Heavy Industry and Stonewell-Bellcom began their joint project of a general-purpose lightweight air superiority fighter designed for comparatively low mass production cost and simple maintenance in 2011. The design was based on the VF-1 Valkyrie's design with research on Zentraedi technology. When the aerospace development divisions of both companies merged to form Shinsei Industry in 2012, the VF-5000 became the new company's first development project and mass-produced fighter. The fighter was mainly designed as a general-purpose lightweight support and air superiority fighter, and its roles expanded to include aggressor and trainer assignments after mass production ended. First flight was made in 2018, and produced from 2020 to 2029.

The VF-5000 found great popularity with the Galaxy Patrol, designated by VF-5000G with the VF-5000T-G being a dual seat version. In fact, many non-lethal munitions were developed for VF-5000s used in this manner.

VF 6 and 7 Series

All of these series were developed as a cheaper fighter for colony planets that had less-established economies. Both models supposedly use the basic VF-1J chassis, but have lighter armor. There is little information on either model.

Both are listed as "light fighter for warfare localized to specific planets *before colonization*". This would suggest some planets were host to some fairly vicious native life.

VF-9 Series

The VF-9 project was the first assignment at General Galaxy for its chief project advisor Algus Selzaa. Development began in 2018, and the first flight occurred in 2021. The VF-9 was intended as a concept for an inexpensive twin-engine light fighter. However, due to input from UN-Forces-assigned test pilot Captain Miriya Jenius, it displayed aerial combat maneuverability higher than the VF-4, the main fighter at the time. As a result, General Galaxy received massive orders from colony planets with reduced budgets, and the VF-9 became its first bestseller. Mass production began in 2023 and ended in 2029.

The VF-9E variant mounts more powerful engines in an attempt to gain the speed of an AVF but retain the maneuverability of the VF-9. The results were mixed, as it was extremely difficult to master control of, and since midair explosion accidents happened one after another, caused production to cease.

VF-10 Series

The VF-10 was a fighter to be built on the VF-4 Airframe in 2028 as a replacement to an aging VF-4 fleet. The VF-X-10 project was funded by the UN Navy in a search for a high performance carrier based variable fighter. The VF-X-10 incorporated some of the latest technology for its day. The project was a complete success and the UN Navy ordered 1,200 VF-10 units. By 2030 only 75 VF-10s had been delivered to 5 UN Navy squadrons, and more were planned to come, until all armed services agreed to buy the VF-11 Thunderbolt. The 4 service investment in Thunderbolts had dropped their price to half that of the VF-10s. The Navy cancelled plans to buy 1,125 more fighters, and

instead ordered the VF-11 Thunderbolt. Lockhee/Martin and Rockwell/Bell, trying to recoup their loss decided to release a Civilian Variant of the VF-10 with no weapons. The factories were quickly changed over from VF-10 to VC-10 and 500 limited edition fighters were produced.

The VF-10 was an official Shoji Kawamori creation, although little information was ever created. Eventually Shoji finished the design for official use as the VF-9. Another side note is that originally the VF-X-11 used this same design.

VF-11 Series

The VF-11 series has the most variants of all VF series due to the continuous renovations in technology while it was in service. The VF-11A had a dual-visor system and shorter barrel on the head-mounted laser. The VF-11B lengthened the barrel and switched to a single visor head. In 2040, all units were upgraded to VF-11C units, featuring upgraded communications equipment and navigation systems. For training, the VF-11D had a second seat with backup controls.

The VF-11MAXL was equipped with more powerful powerplants, originally designed for the VF-16, similar to those mounted on the VF-19 series, and increased structure to withstand the stress. The VF-11 Thunderbolt Interceptor uses the same VF-16 engines and upgrades the FCS and avionics to be on par with the VF-19, allowing it to use AVF weapon systems.

The VF-11D Thunder Focus is a VF-11D with a powerful camera system equal to that used by UN military intelligence. It has an AI designed for rapid video editing, making the unit a mobile video studio.

For heavy combat, any VF-11 except the MAXL may be equipped with the heavy armor system, which packs as much firepower as some smaller capital ships. Shinsei Industries produced the VF-11 from 2030 until 2047.

The Jammingbirds were a set of VF-11D fighters with reinforced armor on the main body, legs and head, and equipped with the Sound Energy System for the purpose of spiritia warfare. UN Spacy made plans for every colony fleet to have a squad of Jammingbirds.

The VF-11E was upgraded with more powerful engines and the pinpoint barrier system. The VF-11F saw an enhanced avionics package from the VF-11E. The VF-11G was the last fleet wide upgrade before being retired from service, being equipped with the holographic cockpit display system as well as even more advanced communications and navigation systems. The E, F and G models are fan-made versions based on logical progression of a retired model similar to the upgrades that continued on the long discontinued VF-1 series, and as such are not part of the canon storyline.

VF-14 Series

The VF-14 Vampire, produced by a joint venture of General Galaxy and Messer, was the first stealth bomber variable fighter. The VF-14 was developed in 2025 and finally released in 2027, and would be the primary fighter-bomber of the UN until being replaced by the VAB-2 Wraith in 2042. It took its design from the SR-71 stealth fighters of the late 20th century.

General Galaxy later worked with Mikoyan to create the VA-14 Hunter which was a heavier bomber with thicker armor and approximately triple the firepower. The

VA-14 was developed in 2025 and released in 2030, primarily for Zentraedi colony fleets and Zentraedi colony defense forces. Many Zentraedi pilots maintain their VA-14 units over the VF-11 series. The VA-14 was intended to fulfill the destroid role of ground assault as well as bombing runs.

Both units saw heavy use in the Macross 5 fleet. Some Japanese sources name this VF-14 Nightmate, which may be a bad translation of vampire (kyuuketsuki).

VF-15 Series

The VF-15 series was created by Macross mecha designer Shoji Kawamori, although no information is available other than this one piece: First variable fighter with a seat which incorporates the biological anti-G boost system. This system stimulates the human body with laser, electromagnetic pulse, infrared, and other means to momentarily activate metabolic functions against stress. It is quite likely this system was related to the Queadlunn-Rau's inertial dampening system, which is later incorporated into the VF-22. It is also likely this was designed by General Galaxy.

VF-16 Series

Created by Shoji Kawamori. All that is known is that it provided the engines for the VF-11MAXL and that it used a delta style wing. It was developed by Shinsei Industries as a high-performance strike attacker but the design was dropped due to budget concerns within the UN government. It is possible that the VF-16 design was used as a basis for the YF-19 during Project Supernova.

VF-17 Series

The VF-17 Nightmare was the next step in stealth fighters created by General Galaxy. The VF-17 uses more advanced passive stealth technology, which includes internal storage bays for the gun pod and ammo clips in the legs, as well as stealth FAST packs to boost its firepower when needed. The VF-17 carries a rather intimidating 7-barrel gatling gun pod capable of chewing an enemy mecha to pieces. Late in the Macross 7/Varauta war, the VF-17's gun pod was altered to be able to substitute a powerful single-shot laser capacitor. The VF-17 is upgraded with a pinpoint barrier system in 2046.

Macross Frontier brings up a new design known as the VF-171, which is a slimmer version of the VF-17, with the role of heavy fighter/bomber. To reduce the high cost of manufacture, many of the specialized systems have been removed, and wing hardpoints are added. Later, as the conflict with the Vajra increased, the VF-171EX was produced, having several upgrades that ultimately did not provide drastic improvement.

VF-19 Series

The VF-19 Excalibur fighter uses a revolutionary new airframe with forward-swept wings, developed by Shinsei Industries in 2034 and tested in 2039-2040 during Project Super Nova. The fighter possesses a pinpoint barrier system, active stealth, extremely powerful engines and the holographic cockpit display. The VF-19 is capable of reaching the atmospheric service ceiling of an earth-sized planet in only 48 seconds.

The VF-19A version keeps the forward canard wings for optimal performance in an earth-like atmosphere, with the -B variant being a dual-seat trainer. The VF-19C is the

most mass produced variant, with increased thrusters and FCS, and the -D variant is a dual seat recon model of the -C. The VF-19E is the standard experimental mass production model. The VF-19F is the space superiority production model, with the -S being the commander type. There is also a VF-19P designed for the Zolan branch of the Galaxy Patrol, equipped with the Laurence Speaker System for spiritia research.

The VF-19EF Caliburn is used by colonial fleets in small numbers for anti-terrorist missions. It also served as a testbed for the EX gear, which allowed pilots to get better performance out of a fighter that was renowned for breaking pilots. There is also a VF-19EFs command model with additional head lasers and expanded communications equipment. A total of 154 units were built by the Macross Frontier, with most going to the SMS and the rest going to the Macross Frontier special forces anti-terrorism unit "Round Table" (for popularity).

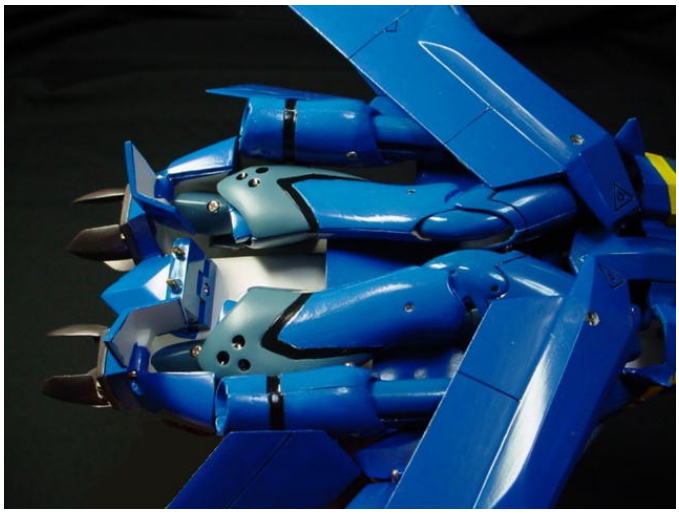
In 2046, the VF-19 is degraded from the mainline fighter in favor of the VF-171 due to the high piloting requirements to effectively use the VF-19 to its full potential (and the high cost to build and maintain). The truth is that the UNG was fearful of giving this unit out to colonial fleets, as Isamu Alva Dyson proved the superiority of the fighter by breaking past the entire Earth Defense System and crippling the Macross with his lone fighter.

VF-21 / VF-22 Series

During Project Super Nova in 2039, stealth fighter experts General Galaxy offered their newest creation. Like the VF-19, the YF-21 possessed powerful engines, pinpoint barrier system and active stealth capability. However, the YF-21 had 3 features never before used in variable fighters. First it did not have the powerplant and thrusters in the legs, instead mounting them in the back. This also allowed the arms and legs to tuck into the body in jet mode, making the battroid look more like the Meltrandi Queadlunn-Rau power armor. Second, the YF-21 incorporated the inertial-dampening system of the Queadlunn-Rau, making it capable of maneuvering at higher speeds than other variable fighters. Lastly, it used an experimental Brain Direct Imaging and Brain Control System. This allowed the pilot to control the fighter directly by thought, increasing response time and performance.

Unfortunately, the BDI/BSC system posed severe problems and was declined. In 2042 General Galaxy removed the problematic systems and presented the VF-22 Sturmvogel, which UN Spacy adopted as a special operations fighter. The limbs can be jettisoned, reducing the mecha's weight, making it faster and more maneuverable although it loses its anti-ballistic shields, pulse lasers, hands, some verniers, and unless it is in fighter configuration, the gunpods. The YF-21 prototype 1 uses conventional controls and canopy with the holographic cockpit display system.

The VF-22HG is developed as advancements in cybernetics continues. It allows a pilot maximum control over their fighter through use of an implant that is far safer and more reliable than the original BDI/BSC system. It finds use in black ops missions by Macross Galaxy.



As shown above, the arms and legs of the VF-22 fold up inside the body, with the hip-connected panels sliding over the recess. The arm shields also function as the aileron flaps.

VF-24 Series

The YF-24 Evolution prototype is mentioned to have been the basis of the VF-25 and VF-27 series designs. In simulated combat, piloted by Major Isamu Dyson of the Reserve Service, the YF-24 defeated twelve VF-19 and VF-22 units, and then defeated six air-to-air specialized QF-4000 drones. In the final computer simulation it was able to fold into a fleet and destroy the bridge of a carrier with a simulated reaction warhead. It was then approved for development and deployment in 2057, and the design was transmitted to UNG colonies and fleets.

The YF-24, designed by Shinsei Heavy Industries, attempted to incorporate many new technologies, including a miniaturized ISC (inertial store converter) which could not successfully be incorporated due to the system having a gross mass of 18 tons. In time the ISC was miniaturized enough to be incorporated. An identical ICS was introduced into the YF-21, but caused a 10% loss of inertia and acceleration and was thus not included into the VF-22.

The VF-25 and VF-27 are considered sister units with the basic design inherited from the YF-24, but performance tendencies differ. The VF-25 fuselage which considers maneuverability/aerodynamic both in concept and performance tendency which can be called the successor of the VF-19, while the VF-27 corresponds to a cyborg, and puts consideration on firepower/output.

VF-25 Series

The YF-25 Prophecy was a testbed for new technology such as the EX Gear. It underwent testing and development before being assigned to S.M.S. for actual combat testing. By 2058, contact with the Vajra was anticipated and development of the SPS-25P/MF25 Paladin armor pack, providing the armor capability of the heavier destroid series.

Macross Frontier fleet's L.A.I. independently developed the VF-25 from the YF-24 prototype as the potential successor to the VF-171/VF-19, the main variable fighter of the New U.N. Spacy. It has not been deployed to the New U.N. Forces yet, but has been

deployed early to the S.M.S. in 2059 for field testing in real combat scenarios. Its offensive weapons include a gatling gun, beam cannons, laser guns in the head unit, and a close-combat knife in its shield. It is observed to have a new model of gun pod and other features, but as a vehicle under secret development, most of its specifications are still unknown. It has a full armor system, however, unlike previous models the VF-25 can transform between all three modes without having to eject the armor.

New design features include: ISC (Inertia Store Converter), Shinsei Industry Macross Frontier Arsenal / LAI Company self-development specification ISC/TO21. Incorporates EX-Gear. Remote control from outside the fighter by EX-Gear is possible via connect slave function. VG wing. Anchoring system (VF-25G). Enhanced communication systems, as well as an on-board AI equipped with battle tactic command programs for assistance (VF-25S). X-shape dorsal and ventral tail fins allow control even if one fin is removed and 3 remain. Newly developed linear actuator improves the transforming system so a majority of moving parts are never in contact, but shift electromagnetically, reducing the transformation time by two-thirds. Also, many of the more fragile mechanisms have been abandoned, resulting in fewer malfunctions, less maintenance, and improved durability for the Battroid mode. Normally, a VF-series' energy converting armor is not active in fighter mode while surplus energy from the engines is used in Battroid mode, however, due to the APS-25A/M25 high-capacity capacitor for the beam guns, energy converting armor is available in all modes. High capacity capacitor built into frontal section of the booster pod. Due to increased waste heat, 4 armored heat sinks (2 on the right and left with built-in Phased array radar) added to the engine pods. APS-25A/P-011 armored block for the aircraft nose exists but was waived due the opinion of Ozma Lee that visibility in close-quarter combat and emergency escape of the aircraft nose was lost. A pinpoint barrier has been centered on the nose to compensate for the loss of armor.

VF-27 Series

The VF-27 uses an upgraded version of the BCS/BDI system as well as advanced inertial dampening systems. This unit is built specifically for cyborg pilots and has a remote control system. The VF-27 has four engines, multiple built-in weapons and a short-range space fold generator. Like the VF-25, this series was developed off the unfinished YF-24 designs. As the template for the VF-27 was not sent to UN Main HQ, it is technically designated as YF-27. The VF-27β is the standard model, with the command version having a different head, while the VF-27γ is the tuned-up version that exceeds standard limits.

The YF-27-5 Shaher Femail is a direct development of the VF-22 Sturmvogel II line which adopts the brain direct connection control achieved with complete implant control for the BDI flight control system that was developed. In addition, it is not equipped with ISC with caution due to the output because it is a technology-demonstrator. Visual stealth, a so-called optical camouflage are adopted for spying operations to the armor and dazzle camouflage for misrecognition and misdirection. Because the particular armament, the BGP-02α, a larger-scale version of the BGP-01β, cannot be mounted on the lower body, it is mounted for use on the right wing. Balance is maintained by mounting an energy unit equipped with a reactor furnace as special equipment on the left wing.

The YF-27-5 unit was used in black operations by the Galaxy company and brought back a great amount of actual combat data to "Guld Works". The approach of this company to develop a mass production unit by illegal means saw perfection in the completed VF-27 afterwards; although it was not able to boast this compliment, it was certainly effective.

VF-29 Series

After the Gallia 4 incident in 2048, which was not made public, a new airframe was necessary to combat the Vajra-threat. The YF-29 was developed in secret to exceed the YF-24, which being developed at the time. For development, it was the sibling unit to the similar VF-25 Messiah, where L.A.I. and the Macross Frontier fleet engineers played a central role. The biggest difference between the VF-25 is the equipping of 4 thermonuclear reaction turbine engines and the breakthrough maneuverability performance through the greater thrust. Although the VF-25 Messiah was an excellent craft, additional equipment such as the Armor pack and the Tornado pack were needed to oppose the Vajra. While the VF-25 Messiah's Tornado pack was a trial-production for proof-of-concept and data collection, the airframe became terribly large when it was attached. The YF-29 applies Fold Quartz extracted from the Vajra into various equipment, such as energy converting armor or fold wave projector, demonstrating capabilities greater than equivalent standard equipment.

The most important part to achieving the specifications are the "Philosopher's Stone"; natural-shaped, highly-purified fold quartz whose refinement has been difficult but successfully acquired from the Vajra corpses. An innovative device called the Fold Wave System enabled an inexhaustible supply of energy was created and the YF-29 was completed at last. The Fold Wave system is an overdrive system with 4 Fold Quartz and is equipped with a total of 4 fold wave devices. Those devices were named after the 4 relics contained in golden hilt of saintly sword *Durandal*, "Saint Peter's tooth", "Saint Basil's blood ", "Saint Denis' hair", "piece of the Blessed Virgin Mary's raiment". But it is the anti-Vajra performance that stands out in the YF-29's distinctiveness. Other than the important communications tracing, it can jam Vajra communications by fold waves. That performance delivered the fold song to the front lines played a major role at the end of the conflict with the Vajra.

VB Series

The variable bomber series includes the VAB-2 Wraith, VA-3 Invader and the VB-6 Koenig Monster. They have little in common other than their ability to carry a large payload of ordinance. These units are designed to also fulfill the role of ground assault, much like the destroid series. The VA-14 can be considered part of this series, but is listed with its VF-14 counterpart.

The VA-3 was developed for conducting local strikes with tactical reaction armament and conventional bombs, developed by Northrom Grumman's aviation division. The VA-3 proved very capable in its role, able to carry 19,200 kg worth of munitions. However, it was sorely outclassed when fighting other variable fighter units. It’s prototype designation was the A-9B Invader. Later, the VA-3M was designed for underwater combat operations. There is also a VA-3C civilian model, which is popular with smugglers and galactic whale poachers.

The VAB-2 Wraith is essentially a mobile missile platform created by the combined efforts of Northrom Grumman and Mikoyan in 2035, carrying approximately 200 missiles in addition to its other weapons and optional bomb payloads. The VAB-2 took over as UN choice bomber in 2046. One drawback of this unit is the inability to carry a gun pod, which was countered by the inclusion of internally mounted pulse lasers.

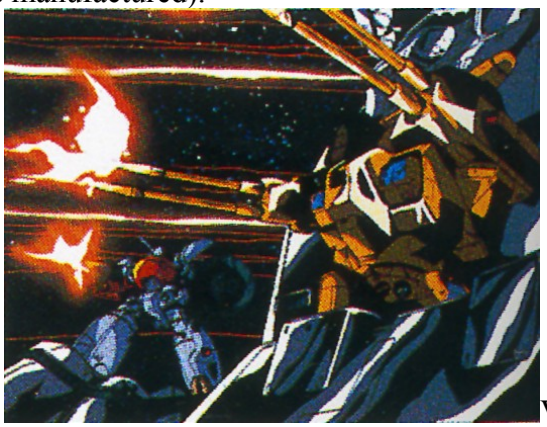
The VB-6 Koenig Monster is a truly scary beast created by Northrom Grumman and Shinnakasu and deployed in 2050. They took the HWR-00 Monster destroid, converted it into a variable fighter, added in extra weapons, increased the armor and made it weigh less. The gerwalk configuration is the original destroid look. The idea came as a realization that the UN needed more than just stealth fighters.

VF-O Series (not to be confused with the VF-0 Phoenix)

The VF-O-1A Orguss Valkyrie is a hybrid design combining elements of a transformable Valkyrie and a non-transformable destroid. Attempting to build a heavier Valkyrie mecha, the Orguss Manufacturing Conglomerate took components from the original Valkyrie and combined them with one of their in-house destroid designs, combined with a SAP add-on module, the hybrid mecha went into prototype testing.

The test units were not as useful as was envisioned due to great inefficiencies in the transformation mechanism. Stock design components frequently snagged and damage could disrupt systems with very low fault tolerances. The finished designs eventually were integrated into the Macross' defensive perimeter.

This mecha is listed in the Macross TV series mecha listing, so it was likely seen in 2010-2011. The reference to Orguss, which was slated to become part of the next chapter of the Robotech saga. However, this unit is listed with standard Macross mecha by several sources, so I have decided to include it. It is entirely optional (not that there were many units manufactured).



VF-O-1A (left mecha)

No formal designation, sometimes called by the fan-ism "Jotun Valkyrie." Appears twice in the original TV series using a single canned animation sequence that ends in it blowing up. Reportedly, this mysterious mecha came from another dimension where the bounds of space and time broke down (see also: Super Dimensional Century Orguss and its sequel). Its inclusion was meant as a joke, since such cross-anime gags like this were common in the 1980's, particularly when both titles were done by the same studio or artist.

Sound Force Series

The Kai (custom) series is not actually a series, but rather a group of individual variable fighters. It was decided that each fleet would have a variable fighter designed for the purpose of instilling culture shock in rogue Zentraedi fleets. The most famous of

these was the red and gold VF-19F piloted by Nekkei Basara of the 7th Macross colonial fleet. Later into the war, as Basara's song proved to be effective against the Varauta, the fleet converted a VF-11MAXL and VF-17T to join Basara in forming Sound Force.

The Kai variable fighters have pinpoint barrier systems, advanced armor (beta), holographic cockpit systems and a unique flight control stick that also functions as a musical instrument. The Macross 7 Special Technologies Group did customization and then the designs were transmitted to other fleets and UN Spacy HQ on Earth in case any other fleets encountered Protodeviln or Varauta.

The VF-11D Jammingbird can technically be included in this group as well. It went on to mass production to be deployed with each colony fleet after 2046 in case of further Protodeviln encounters.

Vanquish Custom

Again, not a series, but collects the one-of-a-kind modified variable fighters competing in the Vanquish race of 2058, with the VF-11B being a highly popular variable fighter for customization.

Among these are the VF-0 Custom "Zeak", VF-11B Nothung, VF-11B Shenandaoh, VF-19A Brauhitsu Special, SV-52γ Oryol, VF-17D Song Cuu Long, VF-11B Thunder Bell III, VF-11B Lacrimosa, VF-11B/X Sister Valkyrie, VF-11B Custom El Camino Real, VF-11B "803", VF-11B Miyabi, VF-11B/MAXL Red Curtain, VF-11B Rev-Splash.

Mostly what these have in common is upgraded engines and avionics. Many of these units see use of the Retrotech rule.

VU Series

This group includes the variable mecha designed for use by civil defense and police forces. There are no specific designations given, however, there are variable mecha designed for use in air, space and on the ground. They find use both on colonies and in colony fleet vessels for riot control and civil defense in case of enemy infiltration; thus I named them "variable urban" series. Design taken from Macross 7.

VZ Series

Another designation named by me, Variable Zentraedi, which includes an upgraded Glaug developed at the New Nile weaponry base, with the initial unit piloted by Moaramia Jifon. Used as the basis for the unmanned Neo Glaug.

The Neo-Glaug manned version has excellent firepower and electronic warfare capabilities, and can control the QF-3000 and QF-4000 drones. The VGP-1 is for macronized pilots, although it is said unless the pilot is a Meltrandi with a small physique, the full potential of the fighter cannot be seen. The VA-110 is the same fighter, but has the cockpit redesigned for micronized pilots.

VF Experimental Series

This group includes many conceptual variable fighters that were originally designed by Shoji Kawamori for the Advanced Valkyrie project in 1985 and in the later VF-E (variable fighter experiment) and VSFE (variable space fighter experiment), but were never actually used. Technically the VF-3000, VF-5, VF-10, VF-15 and VF-16 go in this group as well, but they have sufficient official information to allow their own listings (and some were officially adopted into canon). Due to a lack of official information, most of their stats are going to be extrapolated from their approximate date of design and what other VFs are available, and thus what kind of technology is likely included; so take the stats with a grain of salt.

The SDP-1 Stampede was an attempt by the SDF-1 development to create a better fighter for space combat. One of the concepts was a modified VF-1 with additional weapons to give it the firepower of a destroid. The Stampede lacked the gerwalk configuration due to the relative uselessness of the mode in space combat. The SDP-1 was designed for the Macross: Remember Me game for the PC. Due to the design of the SDP-1, it cannot mount any type of FAST pack. More information on this design is listed below.

The VF-X-11 and VF-X-10 have the same art as the VF-9, and were originally designed and left unused, but then later revised and finished as the VF-9 Cutlass.

The VA-X-3 is an experimental bomber which may have been the basis of the VAB-2 bomber (not related to the VF-X-3 above). The V-BR-2 is designated as a reconnaissance bomber, and may have been the basis of the VF-14 stealth bomber. The VF-X-7 is a VF that is shaped more like a flying wedge than an interceptor, and may have been the prototype of the actual VF-7. The VFS-2 seems to be an armed reconnaissance VF, and may have been meant as the successor to the VERF-1 unit (one source claims it is the VS-XS, the prototype VF-2SS from Macross II).

The AVF-1 and AVB-1, according to one source, were the basis of the SW-XA1 and SW-XA II (although the artwork are nowhere similar). The AVF-1 and AVB-1 appear to be able to combined in the same manner as the Legioss and Tread of Mospeada, with the addition that they appear to be able to change to battroid form while combined.

The XB-70 bomber appears in the DYRL movie as a model on Hikaru's desk. A real life design, the XB-70 Valkyrie was a prototype super-high-speed, super-long-duration bomber designed to drop nukes on Russia. It suffered from being way ahead of its time, and the technology wasn't there to make it workable. Cancelled prior to full production.

The United Nations Forces presented to every manufacturer the required specifications for SW-XA1 Schneeblume (Stealth Wing experimental), a programme to combine high stealth capability with air combat capabilities exceeding that of the VF-17. The United Nations Forces intended to assign the VF-17 the primary mission of long-range attacks, which would entail the need for a separate variable fighter for air superiority and defense. The SW-XA1 was created as an experimental plane for these required specifications. The VF-1 Valkyrie was chosen as the basis for the SW-XA1 due to the abundance of combat data during actual warfare. This base design was improved to current standards by equipping it with upgraded engines and avionics. The pet name Schneeblume was named in a February 2002 Character Model contest after the German term for snowdrop. This flower, which blooms in February to herald spring, is intended to symbolize the vehicle's experimental nature as well as refer obliquely to the warrior maiden connotation of the Valkyrie's pet name. The SW-XA1 has internal missile pallets

much like those of the YF-19, each holding nine of the HM SRMs. The SW-XA II Schneegans (German for snow goose) may be an advancement on the SW-XA1, but no information has been found.

Note about the SW-XA series: These are listed in places as being Macross II mecha, but are also listed as being a supplement or replacement to the VF-17; which was created long after Macross II, so it could not have been considered at this time. For this reason I am leaving these two as Macross mecha, not Macross II mecha. It is also possible the SW-XA1 is the YF-24 as the artwork of the YF-24 in Macross Frontier was very similar to the SW-XA1. Since it was intended to replace the VF-17, it is safe to assume the SW-XA was developed well after 2035. The SW-XA II might be intended as a replacement or advancement of the VF-19.

Unmanned Series

The QVF-11 was a simple training drone using a non-transformable VF-11 chassis. The Neo Glaug is an unmanned version of the Variable Glaug.

SDP Series

During the first battles in the Sol System between Macross and Zentraedi warships of the 67th Glruimual Class Division Vrlitwhai Branch Fleet , the VF-1 Valkyrie series capacities proved to be too weak against enemy warships and thus, the Valkyries were useless for military operations implicating anti-warships actions. The only way to disable enemy warships was to use the SDF-1 Macross Main Cannon. But the intervention of the Macross during each anti-warship action wasn't efficient in terms of strategy and was even hazardous, implicating first the transformation and internal reconfiguration of the ship. Under these circumstances, the military saw the need of a space variable fighter equipped with optional / removable parts with a specialized anti-warship armaments in mind. This anti-warship space fighter should also conserve the capabilities of transformation. The project was drafted on the Macross as it was traveling through the Sol System. The resulting performance of the new anti-warship pack far exceeded the performances of the VF-1's Super Pack, but stayed close of the project's objectives. The only problem was a great loss of maneuverability compared to the Super Valkyrie, because of the increase of fuel and armament loading. Thus, during anti-warship operations, Stampede Valkyries are always escorted by a squadron of Super VF-1 or Ghost Fighters. The task of this squadron being to protect the slower SDP-1's against enemies like the Regult battlepods.

The anti-warship pack is designed for the VF-1 Valkyrie. Unlike the Super VF-1 there are a few modifications that need to be made before a standard VF-1 Valkyrie can be converted into the SDP-1 Stampede. A unique feature of this conversion is the lack of the VF-1's Gerwalk mode. This is because the Gerwalk mode has little useful value in space. Another alteration due to the gestation of this great firepower (ten times greater than on the VF-1) was the replacement of the head-unit by a new one. Apart from the weaponry and the weapon control systems, the global performances in others domains are roughly the same as on a Super VF-1.

Very few SDP-1 were made during the Space War I and they were used exclusively during the war for the Macross which was the sole source of production. The first production run was limited to only 8 units for only one squadron. A second squadron

was equipped with SDP-1 by the time Macross arrived back on Earth. The two Squadrons of 16 units were seen in action against Boddole Zer and Laplamiz fleets in the final battle of the Space War One. After the war the remaining SDP-1s were assigned to Vrlitwhai's UN Spacy flagship, and helped in the capture of the factory satellite. After the war they remained in service in the UN Spacy and Vrlitwhai allied fleet until 2014. A total of 32 SDP-1s were eventually produced before the dawn of the New Era (2013).

VF Units

All units that do not have a VF designation (including all VA, VB, VAB and other types) will be listed after the VF units, in this order: VA, VAB, VB, and any optional/special units at the end (in alphabetical order).

[mecha profiles go here kupo!]

Optional VF Systems

VF-1 Augmentative Systems

These systems attempt to give the VF-1 increased capability or firepower.

VF-1 Conformal Hardpoint Packages

The VF-1 series (after the B model) has a set of three hardpoints that are found on the underside of the fuselage in fighter and gerwalk modes, for the purpose of mounting small-scale equipment options. Because they were made specifically for this purpose, the VF-1 can use them in all modes and transform freely unless specified in the individual listing. These are not typical hardpoints, and cannot mount standard hardpoint options such as UMM racks.

Terrain-following Radar
Hardpoints Needed: 1
Available: 2008
Weight: 2,500 kg
B-Mod: 0.1
CP: 10

This small pod has a downward-looking radar system that allows the VF-1's autopilot to very closely follow terrain at low altitude. This pod is particularly popular with the UN Space Marines, who have on several occasions used this system to exploit mountainous terrain in order to make surprise attacks. This negates penalties for nape of the earth flight (see Sourcebook 1). This pod and system has 3K with 2K armor.

Forward-looking Radar
Hardpoints Needed: 1
Available: 2018
Weight: 2,500 kg
B-Mod: 0.1
CP: 15

Advances in miniaturization allowed for the creation of an extremely compact forward-looking radar system. This pod doubles the sensor range of the fighter in its forward arc, but only can function in fighter and gerwalk modes. This pod and system has 3K with 2K alpha armor.

Vernier Cluster
Hardpoints Needed: 1
Available: 2018
Weight: 2,500 kg
B-Mod: 0.1
CP: 25

These pods are small clusters of Vernier thrusters that increase the maneuverability of the fighter. However, due to their location, these clusters are ineffective in battroid mode. In fighter and gerwalk mode, each such pod adds +1 to effective MV. This pod and system has 3K with 2K alpha armor.

Pinpoint Barrier System
Hardpoints Needed: 2
Available: 2018
Weight: 4,000 kg
B-Mod: 0.1
CP: 120

This early pinpoint barrier system is mounted in a large, flat pod. The barrier projected follows normal PPB rules; however, it cannot block any attack coming from above due to its limited projection arc. The pod is wide enough, however, to project forward in battroid mode. The pod and system itself has 4K with 4K alpha armor.

Note: This system was extremely rare and was not widely available until 2035; even then it was generally not used because of the high amount of upkeep required to keep the system functional. As a result, this pod is rarely seen outside of OSSSF units.

Advanced Missile Pod
Hardpoints Needed: 2
Available: 2020
Weight: 4,000 kg
B-Mod: 0.1
CP: 30

This pod, which is a wide pod like the PPB unit described above, allows VF-1's that do not have the -X or -R refits to use Diamondback missiles as well as (after 2023) CBM-200 and RMS-3 missiles. The use of this pod is the only way for VF-1 fighters to utilize these advanced missiles. Because the pod is a "wide" mount, it can function fully when in battroid mode, as its tracking array can "peek" out from each side of the folded torso. The pod and system itself has 4K with 4K alpha armor.

Conformal Missile Containers
Hardpoints Needed: 3
Available: 2020

Weight: 3,500 kg
B-Mod: 0.1
CP: 15

This option installs the equipment necessary to mount a pair of UUM-series missile containers on the lower body of the VF. Any type of UUM can be carried, but for weight distribution reasons they must be the same type. The third equipment point is occupied with a restraint system that allows the two pods to be extended out to the sides when the VF transforms into battroid mode, allowing them to be used in all modes. The pod and system itself has 3K with 4K alpha armor.

Extended-range Forward-looking Radar
Hardpoints Needed: 3
Available: 2020
Weight: 4,000 kg
B-Mod: 0.1
CP: 75

This system is a larger, longer-range version of the standard FLR pod. It triples rather than doubles forward-arc detection range and will work in battroid mode because its detection apparatuses extend out to the sides rather than being "stuck" under the folding torso. The pod and system itself has 4K with 4K alpha armor.

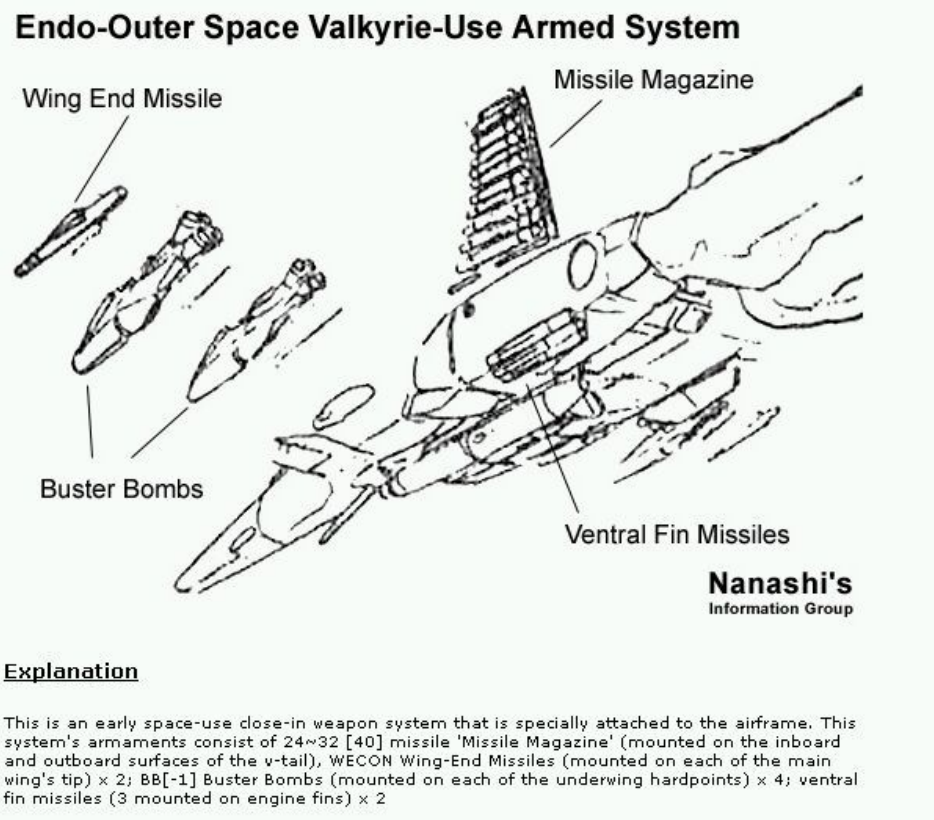
ECM/Active Stealth System
Hardpoints Needed: 3
Available: 2030
Weight: 6,000 kg
B-Mod: 0.1
CP: 350

This system gives the VF-1 the same benefit of the active stealth system found on the VF-19 and VF-22 units. The pod and system itself has 6K with 6K alpha armor.

Prior to 2042, this system was extremely rare and was only available to select OSSSF units for special missions. Even after 2042, this system is fairly rare and is generally reserved for missions where absolute stealth is required (and a VF-22S isn't available).

Endo-Outer Space Multi-Missile System

Late into Space War I, UN Spacy engineers made several attempts at increasing the firepower of the VF-1 series. This particular system is a quick-attach set of missile racks that can be mounted on a VF-1 in fighter or gerwalk configuration (must be jettisoned to change to battroid configuration). The system allows the VF-1 to mount 20 short range missiles to the inboard and outboard surfaces of each of the rear v-tail wings, three on each of the small dorsal fins, and another one to the tip of each of the main wings; a total of 48 additional short range missiles. This is typically used with four buster bombs mounted to the wing hardpoints.
VF Used: VF-1
B-Mod: 1.2 (not including wing hardpoints)
CP: 15, plus 280.8 for 48 short range missiles


Endo-Outer Space Valkyrie-Use Armed System
Wing End Missile
Missile Magazine
Buster Bombs
Ventral Fin Missiles
Nanashi's
Information Group
Explanation
This is an early space-use close-in weapon system that is specially attached to the airframe. This system's armaments consist of 24~32 [40] missile 'Missile Magazine' (mounted on the inboard and outboard surfaces of the v-tail), WECON Wing-End Missiles (mounted on each of the main wing's tip) x 2; BB[-1] Buster Bombs (mounted on each of the underwing hardpoints) x 4; ventral fin missiles (3 mounted on engine fins) x 2

Electronic Warfare Modules

These modules attach to the wing hardpoints of a variable fighter, providing them with ECM/ECCM capabilities. They use normal B-Mod rules for hardpoints (above). Most of them can be mounted in a single hardpoint, although a full set of four is typically used to boost the power of the system.

AN/ALQ-220 A OASIS (Organic Airborne And Surface Influence Sweep)

Consists of a surface minesweeping device towed by a vehicle flying at low altitude. It allows commanders to perform rapid minesweeping missions. It is designed to provide organic, high speed magnetic/acoustic influence minesweeping capability where mine hunting is not feasible (adverse environmental conditions), where mines are undetectable (buried), and avoidance of the area is not an option. It provides high-speed influence mine sweeping capability by generating and imparting underwater magnetic and acoustic signature fields capable of sweeping a wide range of magnetic, acoustic and combination magnetic/acoustic influence threat mines at tactically significant water depths. Available from 2004.

Range is 1000m

AN/ALQ-131(V) Electronic Countermeasures

Handles known, emerging and future terminal threats in a variety of complex, dense threat environments. The AN/ALQ-131(V) electronic countermeasures (ECM) pod is one of the most successful ECM systems ever built. It is designed to easily add new capabilities, and features:

*Full three band, overlapping coverage

*Capable of producing simultaneous jamming techniques to counter multiple, simultaneous threats on a pulse-by-pulse basis

*Integrated broadband receiver

Range is 50km. Available from 2004. Note: the more frequencies being jammed, the less effectively each is jammed. Range reduction is total range divided by frequencies jammed. E.g.: 1 frequency = 50 km. 2 frequencies = 25 km. 10 frequencies = 2.5 km.

AN/ALQ-167 EW Training Pods

Applications include ECCM training, radar test and evaluation as well as tactical self-protection, escort and stand-off jamming. It provides jamming against both airborne and ground based AI radars and GCI radars during air intercept and simulated attack missions (including jamming combined with threat radar simulation). It also provides support and escort jamming during exercises and tactical missions combining simultaneous jamming, threat radar simulation and chaff. Jamming modes are Noise: Spot, Swept, Barrage, Blinking, Swept Amplitude Modulation, Repeater Amplitude Modulation

*Deception: Range Gate Stealer, Velocity Gate Stealer

*Coherent Jamming (DRFM): Multiple False Targets, Velocity Gate Stealer, Range Gate Stealer, Coordinated Range Gate & Velocity Gate Stealer

*Automatic Frequency Set-On Jamming (SOR): Real time control of modes and mode parameters. Multi band simultaneous operation and control. Combined jamming and threat radar missions. Select fore/aft jamming (inbound/outbound). Operational airborne man-machine interface via notebook computer or cockpit control box. Set-up and maintenance via notebook computer.

Range is 50km. Available from 2004.

ALQ-192 Communication Jamming Device

Creates a transmission of radio signals that disrupt radio communications by decreasing the signal to noise ratio. The radio transmitter is tuned to the same frequency as the opponents' receiving equipment and with the same type of modulation, can override any signal at the receiver. The most common types of this form of signal jamming are random noise, random pulse, stepped tones, warbler, random keyed modulated CW, tone, rotary, pulse, spark, recorded sounds, gulls, and sweep-through. These can be divided into two groups -- obvious and subtle. Either has a range of 350km and jams 25% of frequencies. Available from 2020.

* OBVIOUS JAMMING: is easy to detect because it can be heard on the receiving equipment. It usually is some type of noise such as stepped tones, random-keyed code, pulses, music (often distorted), erratically warbling tones, highly distorted speech, random noise (hiss) and recorded sounds. Various combinations of these methods may be used often accompanied by regular Morse identification signal to enable individual transmitters to be identified in order to assess their effectiveness. The purpose of this type of jamming is to block out reception of transmitted signals and to cause a nuisance to the receiving operator.

* SUBTLE JAMMING: is jamming during which no sound is heard on the receiving equipment. The radio does not receive incoming signals yet everything seems

superficially normal to the operator. These are often technical attacks on modern equipment, such as "squelch capture".

Frequency Band Device

Increases the number of frequencies jammed by the ALQ-192 device. Each additional unit jams another 25% of frequencies (thus using a full set of 4 on wing hardpoints will jam 100% of radio frequencies).

ALQ-199 Tactical Noise Jamming Device

Radiates electronic jamming that interferes with enemy radar, blocking the receiver with highly concentrated energy signals. The two main technique styles are noise techniques and repeater techniques. The three types of noise jamming are spot, sweep, and barrage. Range is 350km for 1 frequency, 175km for 2 and 35km for 10. Available from 2020.

*SPOT JAMMING: occurs when a jammer focuses all of its power on a single frequency. While this would severely degrade the ability to track on the jammed frequency, a frequency agile radar would hardly be affected because the jammer can only jam one frequency. While multiple jammers could possibly jam a range of frequencies, this would consume a great deal of resources to have any effect on a frequency-agile radar, and would probably still be ineffective.

*SWEEP JAMMING: is when a jammer's full power is shifted from one frequency to another. While this has the advantage of being able to jam multiple frequencies in quick succession, it does not affect them all at the same time, and thus limits the effectiveness of this type of jamming. Although, depending on the error checking in the device(s) this can render a wide range of devices effectively useless.

*BARRAGE JAMMING: is the jamming of multiple frequencies at once by a single jammer. The advantage is that multiple frequencies can be jammed simultaneously; however, the jamming effect can be limited because this requires the jammer to spread its full power between these frequencies. So the more frequencies being jammed, the less effectively each is jammed. Range reduction is total range divided by frequencies jammed. E.g.: 1 frequency = 350 km. 2 frequencies = 175 km. 10 frequencies = 35 km.

*BASE JAMMING: is a new type of Barrage Jamming where one radar is jammed effectively at its source at all frequencies. However, all other radars continue working normally.

*DRFM (DIGITAL RADIO FREQUENCY MEMORY) JAMMING: or Repeater jamming is a repeater technique that manipulates received radar energy and retransmits it to change the return the radar sees. This technique can change the range the radar detects by changing the delay in transmission of pulses, the velocity the radar detects by changing the doppler shift of the transmitted signal, or the angle to the plane by using AM techniques to transmit into the sidelobes of the radar.

ALQ-200 Multi-Band Track Breaker

Is used to deceive enemy tracking radar in single target track mode. These are typically fire control radars associated with SAMs, AAMs and AAA. Track breaking techniques are therefore of major importance in tactical and strategic aircraft.

Track breakers attack the automatic tracking mechanism of the victim radar. If the threat is a pulsed radar a track breaker will usually transmit a 'cover pulse' at the same time as the return pulse. This masks the return and the victim tracking mechanism is then allowed to lock on to the cover pulse rather than the weaker real return. The jammer has then seduced the tracking mechanism and can, within limits, move the target about its real position and typically turn it off to break lock.

The target will often be made to erratically jitter which makes it impossible to accurately guide a missile or fire a gun at the target. Range is 350km. Available from 2020.

AN/ALQ-218 Tactical Jamming Receiver

It provides real-time situational awareness for tactical cueing of jammers/ onboard sensors. It is the first tactical jamming receiver system with proven "look-through" software to permit periodic surveillance of the threat environment while jamming is in progress. The "look-through" capability allows the ALQ-218 receiver system to operate in close proximity to onboard high power jammers. It provides vehicles equipped with it the ability to precisely identify and pinpoint the location of enemy radar sites for a more effective use of HARM missiles. Range is 350km. Available from 2030.

ALQ-192 Electronic Warfare Jamming Modules
VF Used: VA-3 only
Kills: 1 per unit
Armor: MS – 5K, SP 5
Weight: 3,000 kg per module (12,000 kg total)
B-Mod: 3.0
CP: 252

This system requires a full 4 wing hardpoints to mount. The pods (set of 4 STR pods) together contain ECM units for missiles, radar and sensors, as well as an ECCM unit. All of them are power 6, radius 8, beaming 10.

Space Fold Modules

After Project Supernova in 2039, variable fighters may be fitted with a space fold booster capable of making space fold jumps up to 20 lightyears.

Shinnakasu Industry/OTEC FBF-1000A Space Fold Generator
VF Used: Any, but usually used on AVF units.
Kills: 5
Armor: MS – 5K, SP 5
Weight: 7,500 kg
B-Mod: 1.0
CP: 150

This system is a pod that contains a variable fighter scale space fold engine, which allows superluminal flight. The fold generator has a range of 20 lightyears, and can only be guaranteed for one trip, thus meant to be disposable. This allows the VF to travel at 1 lightyear every 90 minutes. They are intended to be mounted on the top of the VF in fighter form, although they have been used on multiple occasions by VFs in battroid form as a hand-held device. A fold generator has a theoretical weight limit of 48,305 kg (a little over 48 tons), but increases exponentially with multiple units. Also, these devices have quick attach magnetic clamps that can be used to attach them to larger ships (it took 4 to space fold a Sunnyflower Agricultural ship). This is not available until after 2040; the prototypes were tested in Project Supernova in 2039.

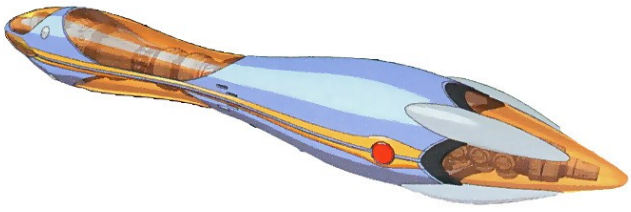
The fold booster has a self destruct to prevent it falling into Anti-UN hands, as well as a homing beacon with a range of 640km.

FAB-1000 Space Fold Generator

Statistically this is identical to the FBF-1000 (above), but is designed for use with the Queadlunn-Rhea power armor.

FBF-1001A Late Generation Fold Generator

VF Used: Any VF with space-fold capable navigation (usually VF-17 and on)
Availability: 2050+
Kills: 3
Armor: MS – 5K, SP 5
Weight: 4,000 kg
CP: 200



This later generation space fold generator can recharge itself, taking up to 6 hours to recharge completely. While it is still only rated for space fold travel up to 20 lightyears, as long as the complete charge is not drained, the variable fighter may make an additional short-range space fold (i.e. it can make 2 space fold jumps as long as the total distance does not exceed 20 lightyears). It allows travel at 1 lightyear every 90 minutes.

Those variable fighters with electromagnetic linear transformation can use their EM generation to reattached a purged 1001A generator if they get within 1 hex of it.

The fold booster has a self destruct to prevent it falling into Anti-UN hands, as well as a homing beacon with a range of 640km.

Super Fold Booster
VF Used: VF-25
Availability: 2059+
Kills: 4K
Armor: HS – 4K, SP 4
Weight: 3,500kg ?
CP: 250

This space fold booster developed by L.A.I. in 2059 uses fold quartz. The unit allows travel through fold faults and is far more efficient; shrinking the universe to 10% of its full size. This increases travel at 1 lightyear every 9 minutes. It is rated for space folds up to 20 LY. Due to its advanced design, it can fully recharge itself for another fold in just 36 minutes.

The super fold booster has a self destruct to prevent it falling into Anti-UN hands, as well as a homing beacon with a range of 640km.

<u>Optional Gunpods</u>

Not all variable fighters have to carry a Hughes series gunpod unit. Throughout the history of the UNG, there have been many attempts to increase the firepower of a variable fighter to be comparable to that of the destroid series. Additionally, several non-lethal gunpods were developed for specialized use.

This covers all hand-held ranged weapons used by variable fighters that is not a standard-issue gatling ballistic gunpod.

EP-1 Beam Bazooka
VF Used: VF-1, also Spartan

In an attempt to increase the firepower of a VF-1 late in Space War I, engineers took the PBG-11 from a Tomahawk and converted it into a hand-held heavy rifle with a power pack. The drawbacks were that it could only be used by a destroid with hands or VF in battroid or gerwalk mode, and had to be dropped if the VF changed into fighter mode. Furthermore, the energy cell had a habit of exploding (1-3 on a d10 if the rifle is hit), inflicting 10K damage with Blast 1 template. When not hand-held, it must be carried on one of the VF's wing hardpoints.
EP-1: +1 WA, Range 8, 10K, Clip 10, Warmup 1, 10 Kills, CP 10.7

EP-5 50mm Particle Beam Cannon

VF Used: VF-1-R

During the invasion of the Burado fleet in 2036, the earth defense forces scrambled to upgrade the older variable fighters still in storage to be able to perform better. One such upgrade was the EP-5 beam cannon to replace the GU-11 gunpod.
EP-5: +1 WA, Range 6, 12K, Clip 20, Warmup 1, 12 Kills, CP 10.9

HGU-1 Erlikon Autocannon
VF Used: VF-1, also Spartan

This was another attempt to increase the firepower of the VF-1 series late in Space War I. This heavy "machine gun" was one of the Erlikon Contraves II units from a Defender. The ammunition clip only held half as much ammunition, but could be quickly changed in battle. The major drawback to the weapon was the lack of recoil suppressors that were built into the Defender's frame. This would cause great inaccuracy with the weapon, and could further damage the mecha's targeting sensors; when a 1 is rolled to hit with this weapon, it causes the sensors to misalign and imposes a cumulative -1 WA penalty to all attacks as well as a similar penalty to use the sensors to track targets until fixed. When not hand-held, it must be carried on one of the VF's wing hardpoints.
HGU-1: -1 WA, Range 10, 3K, BV3, All-Purpose, 3 Kills, CP 24.96

Ammo Clip: Payload 50, AP, 4 Kills, CP 12

EGU-1XX Gunpod
VF Used: VF-1SOL

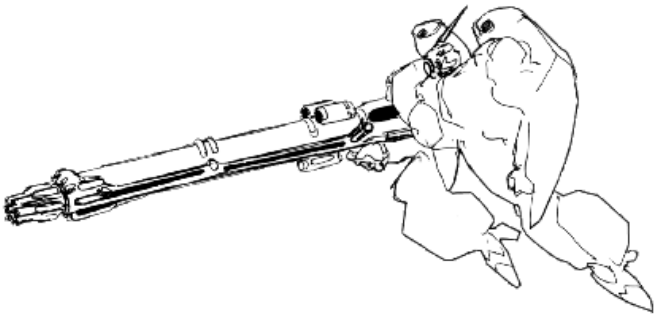
This was another attempt at increasing the firepower of the VF-1 series. Unlike previous attempts at using destroid weapons, the EGU-1XX was designed from scratch. The weapon is a high powered laser with a reloadable energy clip. When not hand-held, it must be carried on one of the VF's wing hardpoints.
EGU-1XX: +1 WA, Range: 5, 4K, Ammo 25, 4 Kills, CP 37.9 [1 CP per clip]

ERC Electromagnetic Rail Cannon
VF Used: VF-4SP

This weapon uses an electromagnetic rail to fire a single slug at super high velocity. The purpose was to have a weapon capable of punching through the armor of light capital ships and heavy mecha armor. Its ammo is internally loaded, and requires proper tools to reload. When not hand-held, it must be carried on one of the VF's wing hardpoints.
ERC: +1 WA, Range: 57^2 (3,220), 7K, Long Range, 7 Kills, CP 63.84

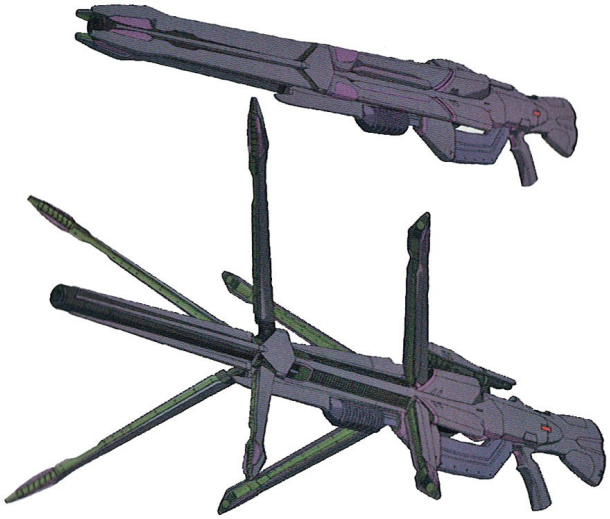
Ammo: Payload 15, AP, 4 Kills, CP 9.6

XS-06 Heavy Gunpod
VF Used: VF-11 GPB



This oversized gunpod is only issued with the GPB for the VF-11 series. It is nearly the length of the VF-11 in fighter configuration and is far too heavy for use except in the weightlessness of space. It fires large caliber rounds at an impressive rate.
XS-06: +1 WA, Range 30, 3K, BV6, All Purpose, 3 Kills, Armor 3K/SP3, CP 163.8
Ammo: Payload 60, AP, 4 Kills, CP 393.12

SSL-9B Dragunov Electromagnetic Rail Anti-Armor Sniper Rifle
VF Used: VF-171, VF-171EX, VF-25G



This weapon is used by the VF-25G sniper model. It has 8 target assisting balancers and uses SP-55X 55mm ultra-high-speed armor-piercing ammunition. With the built-in scope and AI fire-control, the error margin of firing is less than 10cm at a distance of 20km. Muzzle velocity of SP-55X cartridge is 6,200m/s and can be increased to 7,490m/s for ultra-long-range firing. Cartridge is capable of piercing 300mm GFS-a2 composite armor used on the Destroid series.
SSL-9B: +3 WA, 5K, Range 57^2 (3,220), 5 Kills, Hypervelocity, Long Range, 139.65 CP
Ammo: Payload 12, AP, 67 CP
Ammo: Optional drum carries 30 rounds for 167.58 CP
* After being upgraded with MDE technology, increase the ammo cost to 134 CP for a clip or 335.16 CP for a drum and add the Anti-Vajra trait.

Howard GU-14B Custom Particle Beam Cannon/Vulcan Matrix
VF Used: VF-171EX

This combination MEDC-30-EX-A anti-Vajra particle beam cannon and 30mm vulcan cannon combo was designed to give the VF-171 effective anti-Vajra capability. While it is technically a GU series, it gets listed here because of its unique design.
GU-14B: 7 Kills, Mated, ?? CP

Quantum Beam: +1 WA, 7K, Range 32, Anti-Vajra

30mm Vulcan: +1 WA, 2K, Range 24, Anti-Vajra, BV6, All Purpose

Ammo: Payload 30, AP

BGP-01α Quantum Reaction Beam Gun
VF Used: YF-27-5

This prototype of the one used by the YF-27 was tested in 2058 by the YF-27-5 Shahir Femail in the Vanquish race. It is bulkier and heavier than the -β unit, and thus it cannot be mounted on the body hardpoint. Instead, it mounts on the right wing hardpoint, and mounts a reactor powerplant for the gun on the left wing hardpoint to act as a counterbalance. It is identical to the -β except that the cost is reduced to 75 CP due to the lesser miniaturization of the unit.

BGP-01β Quantum Reaction Beam Gun
VF Used: YF-27

This is the standard weapon for the YF-27 variable fighters of the Macross Galaxy fleet. It is a multi-purpose energy rifle that can fire standard beams, rapid fire and a small scale quantum energy beam capable of punching through the armor of a capital ship.

The BGP is an energy pool weapon with three modes of firing, has 13 Kills and costs 82 CP. The energy pool provides 50 charges, and regenerates 1 charge per minute.
Pulse: +1 WA, 2K, Range 24, BV4, All Purpose (1 charge)
Beam: +1 WA, 5K, Range 32, Disruptor (1 charge)
Beam Grenade: +1 WA, 20K, Range 64, Warmup 1, Blast 1 (10 charges)

* When upgraded with anti-Vajra particles, increase the CP cost to 164 and add the Anti-Vajra trait.

Howard/LAI HPB-01A Heavy Quantum Beam Gun
VF Used: YF-29

High energy output beam gun for use against the Vajra in 2059.
HPB-01A:

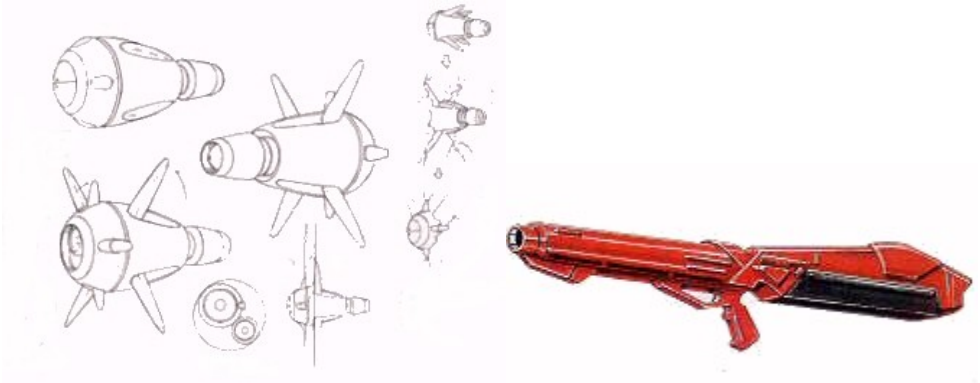
Zolan Shock Gunpod/Missiles
VF Used: VF-5000G, VF-5000T-G

These weapons are used by the Zolan space patrol to capture criminals (smugglers and poachers) without harming them or their mecha. The gunpod fires globs of viscous gel that gums up mecha servos, imposing a -2 MV penalty for each hit and prevents a variable fighter from changing modes. Furthermore, if a blob strikes the head (or pod where main sensors are), the sensors are rendered useless. Striking a weapon with a called shot will disable the weapon. It takes several hours of detail cleaning to clear out this gel, so it typically cannot be done during combat.

Also, the viscous nature of the gel can protect a human that has ejected or was dropped in space. Each “blob” of gel from the shock gun can protect a person from the perils of space for 1 hour, however the impact of being hit with this stuff will inflict 2d10 hits of non-lethal damage. This option is also available in micromissiles for 1 CP each, and has Blast 1 and increases to -4 MV (more goo).
Z1: +0 WA, Range 5, 2K, Payload 20, 2 Kills, 5 CP [2.3 CP per reload]

Speaker Gunpod
VF Used: VF-19 Kai, VF-17T Kai, VF-11MAXL Kai, VF-11B Nothung II

Speaker gunpods are considered to do 4K damage for purpose of armor penetration, although due to their sealing system they do no effective damage and cannot penetrate armor higher than Alpha class. The projectiles have a high powered speaker and broadband receiver as well as a minor piracy system to hijack the target's audio system.
SG: +2 WA, Range 5, 4K, Payload 12, 4 Kills, 16 CP [2.3 CP per reload]



Spiritia Gun Pod

This is an older, less compact version of the spiritia-draining beam built into most current Varauta mecha. It will drain 20 Spiritia per round from a target (or 200 per round against Protodeviln). These were captured by the Macross 7 fleet and refitted so that instead of channeling the spiritia into a storage cell, the spiritia is bled off into the surrounding area. Technical specifications are kept on hand by all UN fleets should they be needed again.

This variation of the Varuta system is not designed for harming human sized targets, but rather it is designed for quickly draining Protodeviln (thus no anti-personnel trait).
SpG: +1 WA, Range 3, 3 Kills, drain up to 50 spiritia/turn, 10 CP

GCU-03 Custom Camera Pod

Equipped on the VF-11D Thunder Focus. It also functions as a communications array.

<u>Miscellaneous Weapons</u>

This covers weapons that aren't gunpods.

Heavy Weapon Module

VF Used: VF-19, VF-11
Kills: 7
Armor: MS – 5K, SP 5
Weight: 2,500 kg (weight efficient)
B-Mod: 1.0
CP: 43.5

This is a weapon module worn on the right arm of a variable fighter while in battroid or gerwalk form. The heavy laser requires a charge up time, and if the capacitor is hit while charged, the VF wearing the unit suffers full damage from the laser to its arm. The VF cannot transform to fighter mode while wearing this weapon. The capacitor and lasers draw their power from the VF's own nuclear power supply through a connector in the elbow of the VF (no CP, very minor modification). All weapons are mated and crosslinked.

It should be noted that if the module is destroyed while the heavy laser capacitor is charged, the capacitor will discharge and inflict 5K per turn of charging to the arm of the VF, with any leftover damage going to the torso.

Pulse Laser: WA +1, 3K, Range 24, BV 3, All-Purpose
Heavy Laser: WA +2, 15K, Range 60, Warmup Time 3 turns
Micro Missiles: WA +1, 3K, Range 32, 5 tubes of 3 missiles – 15 total

AK/VF-M9 Ka-Bar Assault Knife
VF Used: VF-171, VF-25, VF-27

Designed as a close combat weapon for variable fighters in battroid configuration. This knife is a 1.65m long blade of similar material as the armor and can be reinforced with the VF's pinpoint barrier. While so empowered, the knife gains the EMW (energy melee weapon) trait (-4 SP). The VF-25 keeps this blade in a binder inside the shield while the VF-27 has the blade retractable in the left arm.
AK/VF-M9 Assault Knife: +1 WA, 2K, 2 Kills, 1 Space, AP, Quick, 1 CP

<u>Soundforce Systems</u>

In addition to the speaker gunpods and the Sound Booster FAST Packs, several systems were developed for spiritia/cultural warfare.

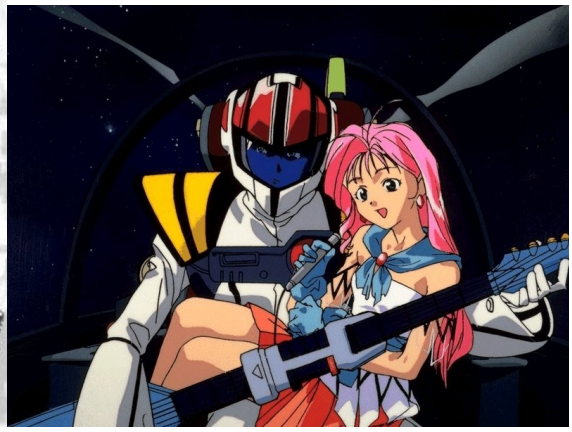
Sound System & Holographic Projectors

These systems are built into the Sound Force VF units. They have high definition speakers as well as radio transmitters that send on multiple frequencies simultaneously. Loudspeaker can amplify to 300 decibels. They also have a holographic projector in each unit that is used for impressive stage pyrotechnics. While this cannot cloak the VF (rather they do the opposite, granting +1 WA bonus to opponents firing on them in "darkness"), they can impose a -2 WA penalty (in normal light) on all opponents who try to attack the VF for the first 2 rounds of combat until they adjust to the light show. This is not the SES or Sound Booster (see FAST Packs below). The system is usually split between both arms, although it's not uncommon to have it in the torso. This also includes a very good stereo system.
Cost: 10 CP

Space: 2

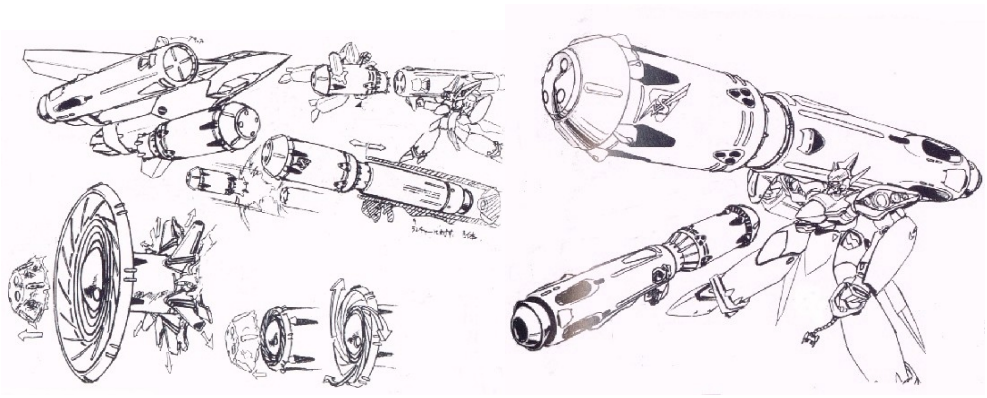
Guitar-Stick Control System
VF Used: VF-19 Kai, VF-17T Kai, VF-11MAXL Kai
CP: 10

One of the strangest and most unique features of the “Kai” series VF are their control system. The mecha completely eliminates the standard pilot controls in favor of a specially constructed "guitar" that provides all the controls necessary to fly the plane. This allows skilled pilots of the VF to fly in combat while playing music. This system allows the pilot to use their Play Instrument skill in place of Mecha Pilot. Anyone without the Play Instrument skill suffers a -8 penalty to pilot a VF with this system. This system can also be set up with a keyboard-stick control instead of a guitar-stick.



Speaker Pod Gamma
VF Used: any, but Basara is the only person to use it so far
Armor: HS – 60K, SP 60
Damage: 50K, AP, Disruptor
CP: 750
Weight: 20,000 kg

This is essentially a corvette scale, armor-piercing/disrupting missile with no explosives. Instead, it contains a VERY big speaker, radio receiver/transmitter, pinpoint barrier system and a piracy system. The missile impacts into a starship or corvette and then the secondary thrusters fire to force the missile through the hull, where the front end of the missile falls off and the missile pours resin into the breach to seal it. The front of the speaker pod is further protected with a mecha-scale pinpoint barrier system. The piracy system forces the video and radio receivers in the ship to accept and tune into the signal sent from the VF that fires the missile. The speaker can reach to 500 decibels, and the missile is +3 WA. The speaker pod gamma imposes a -6 penalty to all rolls in the immediate section of the ship where it is attached, and a -3 penalty throughout the ship, plus it can deliver culture shock and spiritia attacks. This can be fired as a hand-held weapon, or one mounted per wing (takes 2 hardpoints to mount)



Laurence Speaker System
VF Used: VF-5000, VF-19

This system was designed by Laurence, a Zolan scientist, during the events of 2047 when Basara proved communication with the great white Galactic Whale was possible. The system is a smaller version of the Macross 7 Scientific Group's sound booster system designed for communication and study rather than for spiritia warfare. The speakers can amplify up to 200 decibels and transmit on most frequency ranges simultaneously. It is later upgraded to have a miniaturized SES (see FAST Packs below).

The speakers mount on the shoulders.
CP 15, 2K per shoulder/speaker

<u>Miscellaneous Systems</u>

Everything that doesn't fit cleanly into another category.

VF Conformal Fuel Tank
VF Used: VF-0
CP: 20 per pair
B-Mod: 0.5 per pair

These are a pair of external fuel tanks that attach to the wings of the VF-0 to increase its range. The VF's computer will automatically eject the tanks if one of them is breached. Each tank has 3K/SP3 of armor and provides a total of 500 km of fuel per pair. Furthermore, a micromissile launcher was added to the front, capable of firing volleys of up to 8 micromissiles at a time; has a payload of 24 each.

Micromissile Cluster: +1 WA, 3K, 32, Payload 24 each, 5K, CMV

Drone Control System
VF Used: RVF-25, VF-27

This system allows a variable fighter to direct drone units. The RVF-25 can control up to 6 drones and has the following profile (Control 20, Operation unlimited, CM 2). Control range means that the controller may alter or issue commands while the drone is within 20 hexes (1km), and Operation range means the drones continue to operate on existing commands out to any range.

Drone control is based on the skill/stat of the controller and the CM (control multiple). Take the Skill and Stat of the controller and multiply both by the CM, then divide these values by the number of drones being controlled. For example, a controller with Piloting 6 and AGIL 9 using this system to control 3 drones will have an effective Pilot 4 and AGIL 6 for rolls using the drones. The effective skill and stat may never exceed the controller's in any situation.

For both the control multiple and control range, most drone controllers give the drones a broad set of instructions and send them to do their job. The drone controller takes 1 Space, has 1 Kill and costs 72 CP.

Markerlight

This is a laser designator used to "paint" a target with a laser targeting beam. When a target is painted, the laser beam reflects off the target, allowing "smart" missiles to lock onto the painted target. While so painted, smart missiles gain an additional +7 WA bonus regardless of the range from the unit that fires the missile.

While painting a target, an attack roll must be made on each consecutive turn (easy against immobile targets) until the impact of the missile. If the painting is interrupted or misses on a turn, the missile loses lock (and the WA bonus) and reverts to its original program and bonuses. If the painting can be reestablished before impact, the bonus can be restored.

If the target has the advanced sensor package, it will alert them to the fact they are currently being painted. Firing through smoke will reduce the WA of the painting laser to +0. This system works with any scale missile as long as it is "smart" (+2 WA+ or Seek trait).
+3 WA, Range: 40 (2000m), 1 Space, 1 CP

<u>Reaction & Dimensional Weapons</u>

This covers all reaction (pair-annihilation) and dimensional (dimension-eater) weapons and specialize munitions for use against the Vajra. Use of these weapons requires UN Government authorization or the "exceptional circumstances" clause (found in Sourcebook 1: New Unity Government); use without these constitutes war crimes of the most heinous sort.

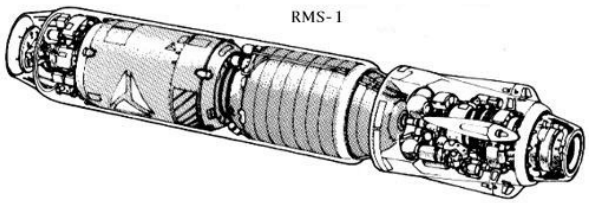
Reaction Missiles

Reaction warheads are advanced pair-annihilation (anti-matter) weapons for use by VF units, but pack the punch of a capital ship weapon. These are not listed with standard warheads because they are extremely powerful and require UN Spacy orders to be used in combat. Each missile costs as much as a New Macross Class carrier in terms of CP.

There are a few classes of reaction weapons; the SIMM-75 is the first reaction missile to use OT technology, the RMS-1 “Angel of Death” cruise missile used during the latter part of Space War I by VF-1S Strike units, the RMS-2 upgrade in 2013, the RMS-3 “Archangel of Death” upgrade in 2023, the RMS-4 "Planet Buster" (after 2035), the RMS-4 (204X), the RMS-5 (205X+) and the RMS-6 (2059+) that is assigned for use on special missions and requires clearance from UN High Command.

All types are Nuclear, Blast 200, Seek 4, Skill 20+, Long Range. They are large enough that only two can be mounted per hardpoint (makes 3rd hardpoint per wing unusable) or one per internal pallet. These missiles are effectively Mekton scale weapons that inflict starship scale damage. They use the rules for Nuclear Warfare found in Sourcebook 1: New Unity Government.

SIMM-77 – 750K, Range 200^2 (40,000 maximum), 4K (50 to 150 kiloton adjustable)*
RMS-1 – 1000K, Range 240^2 (57,600 maximum), 5K (50 to 200 kiloton adjustable)*
RMS-2 – 1000K, Range 250^2 (62,500 maximum), 5K (50 to 200 kiloton adjustable)*
RMS-3 – 2500K, Range 250^2 (62,500 maximum), 6K (500 kilotons)
RMS-4 "Planet Buster" – 4000K, Range 275^2 (75,625 maximum), 7K (800 kilotons)
RMS-5 – 5000K, Range 250^2 (62,500 maximum), 8K, (1000 kilotons)
RMS-6 – 6000K, Range 250^2 (62,500 maximum), 9K, (1100 kilotons)



* The SIMM-77, RMS-1 and RMS-2 have variable yield capabilities. They inflict 250K per 50 kilotons.

DE “Dimension Eater” Warhead

This is a fighter mounted version of the planetary-scale dimension eater bomb (see Chapter 5). The warhead creates a space fold bubble and collapses it in, destroying everything in the blast radius. This weapon is developed by the L.A.I. group in 2059 to combat the Vajra. Like its bigger cousin, this does not inflict damage and ignores all armor and shields.

DE – Range 250^2 (62,500 maximum), 10K, Blast 6000 (300km maximum), Long Range

MDE "Mini-Dimension Eater" Warhead

MDE is an abbreviation of Micro-Dimension Eater. Using a fold quartz micro-crystal in the warhead, material is shot into the super dimension within the extremely limited effective range (it's almost impossible to defend against it). MDEs are easy to use because the warheads can be exchanged on existing armaments, and they are also effective against the Vajra.

Because these warheads don't inflict damage in the traditional sense, there is no "damage" for armor to "resist". MDE warheads ignore armor and shield SP, inflicting damage directly to the armor *and* servo Kills. In the case of larger missiles with a Blast rating, anything caught in the blast is simply gone.. no armor, no shields.. the only hope is a good dodge roll.

MDE warheads have a cost multiplier of x0.5 applied to the normal missile cost (that is they cost 50% more).

Anti-Vajra Weaponry

Late in the war with the Vajra in 2059, the Macross Frontier and L.A.I. discovered a way of overcoming the Vajra's ability to adapt to damage by incorporating MDE particles into their weapons. With the particles of fold quartz interlaced into the particle beam flow or mixed into the material of the projectile, it makes the beam partially "phased" or the projectile to be able to break Vajra carapace, allowing it to function as AP against Vajra. Furthermore, it is harder for the Vajra to adapt to, making it take at least twice as long adapt.

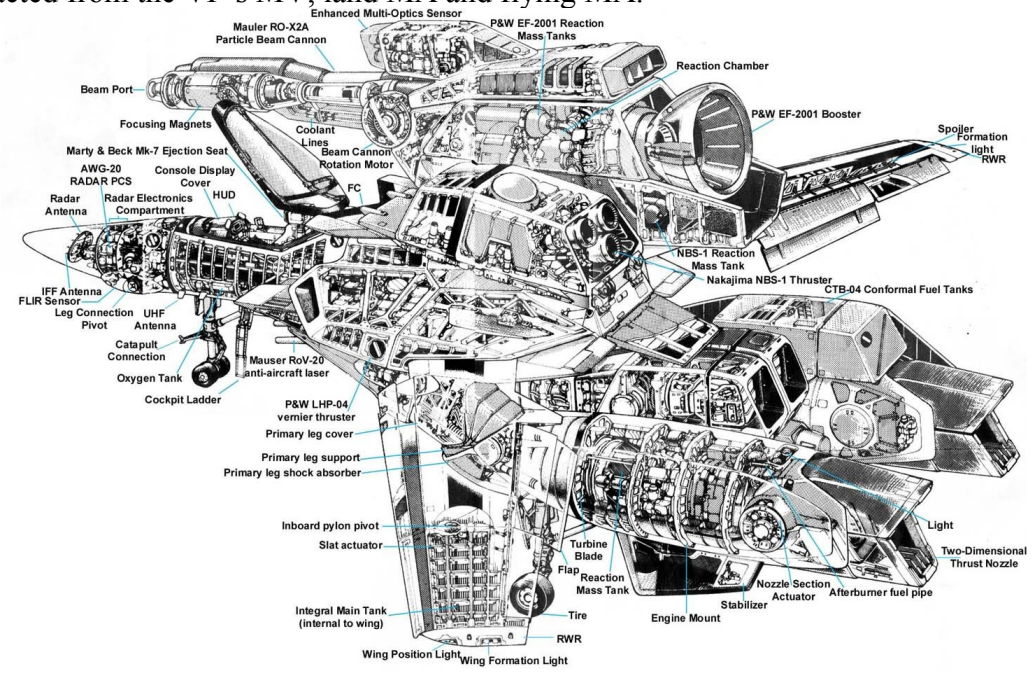
Beam weapons and ammunition with this modification have a cost multiplier of x0.2.

FAST Packs

FAST Packs are typically used only in space or space-to-surface assaults since they cause excessive drag in an atmosphere. While in an atmosphere, the verniers only offset their listed B-Mod, but in space they eliminate all of the B-Mod and also grant a +1 bonus on all Piloting rolls. Unless specified, all FAST Packs must be jettisoned to make reentry.

Unless specified in the description, all FAST Packs are explosive due to missiles and/or fuel, and will automatically eject if their armor is penetrated (unless the auto-ejector is offline). Additionally, FAST Packs count as pseudo-command armor; when a section with a FAST Pack is hit, the pack will take the hit on a 1-5 on a d10.

The weight of FAST Packs only deals with the VF's maximum takeoff load and for determining knockback. The total B-Mod is added up from the various packs and subtracted from the VF's MV, land MA and flying MA.



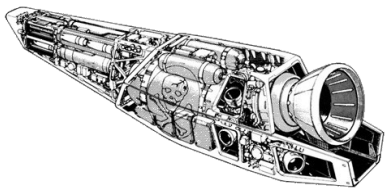
Dorsal FAST Packs

All dorsal mounted FAST packs are MS class pods that have verniers to help counter their drag on the VF, and contain boosters that provide 200 MA of boost with up to +20 MA per turn, before their internal fuel supply is exhausted. This allows most VFs to escape earth's gravity. All statistics are for a single FAST pack unless noted, and almost always requires buying a pair or pre-built set.

NP-BP-01 FAST Pack

The forward section with the missile launchers can be ejected/removed, making reload time quicker with pre-loaded modules.

VF Used: VF-1, VF-4, VF-11, VF-14, VF-19, VF-22
First Produced: 2009
Armor: HS – 5K, SP 5
CP: 40
Weight: 2,500 kg
B-Mod: 1.2



Systems:

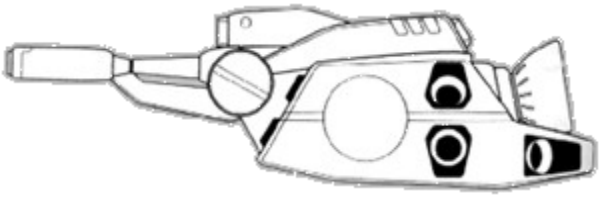
HMMP-02 Micro Missile Launcher (x4): +1 WA, Range 32, 3K, Payload: 5 each, CMV, 1 Kill

Overboosters, 12 Kills

Verniers +1

NP-BP-02 FAST Pack

VF Used: VF-1, VF-4, VF-11, VF-14, VF-19, VF-22
First Produced: 2009
Armor: HS – 5K, SP 5
CP: 43
Weight: 2,500 kg
B-Mod: 1.2



Systems:

Mauler RO-X2A Beam Cannon: +1 WA, Range 30, 5K, Clip: 20, 5 Kills, Warmup 2 turns

Overboosters, 12K

Verniers +1

*Each shot (per barrel) uses one charge. When not moving, the capacitors recharge 1 charge per turn. When in cruising flight, the capacitors recharge 1 charge every 6 turns. The capacitors cannot recharge while in combat.

NR-BP-T1 FAST "Trainer" Packs

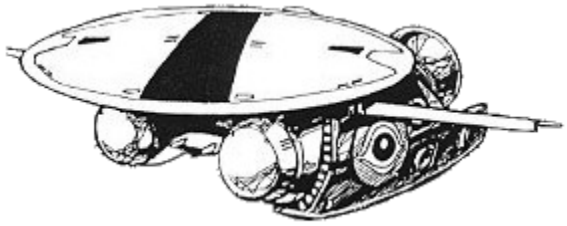
Trainer packs with additional fuel payload for longer duration training sessions.

VF Used: VF-1, VF-4, VF-11, VF-14, VF-19, VF-22
First Produced: 2009
Armor: HS – 5K, SP 5
CP: 18.7
Weight: 2,500 kg
B-Mod: 1.5
Systems:

Overboosters, 15 Kills (500 MA)
Verniers +1

NR-BP-E2 FAST Pack

This is automatically a pair of FAST packs with advanced sensors sandwiched between them. Only the VE-1 can transform out of fighter mode with this attached.



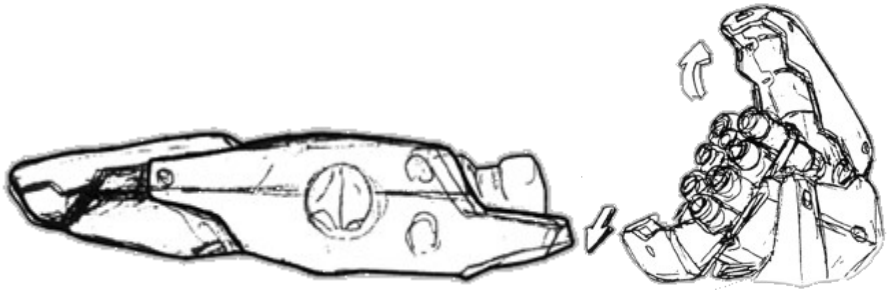
VF Used: VE-1, VF-4, VF-11, VF-14
First Produced: 2009
Armor: HS – 5K, SP 5
CP: 44.5 for the set
Weight: 6,000 kg for the set
B-Mod: 2.2
Systems:

Advanced Sensor Suite: 10 spaces, 4 Kills

Contains – Advanced Sensors, Radio/Radar Analyzer, Spotting Radar, Target Analyzer, Resolution Enhance 10x. Doubles the number of units the combat computer can track at once.

Overboosters, 12 Kills each
Verniers +2

NP-BP-10 FAST Pack
VF Used: VF-1, VF-4, VF-11, VF-14, VF-19, VF-22
First Produced: 2025



Armor: HS – 5K, SP 5
CP: 27.8
Weight: 3,000 kg
B-Mod: 1.2
Systems:

HMMP-4 Micro Missile Launcher: +1 WA, Range 32, 3K, Payload: 27, 5 Kills, 5 spaces, 5.4 CP

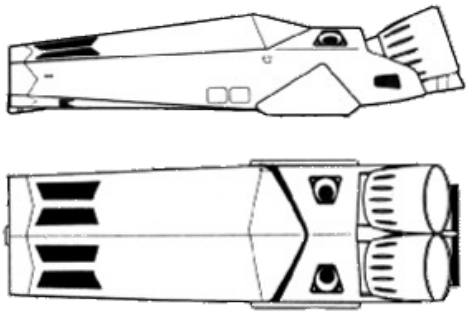
Overboosters, 12 Kills
Verniers +1

NP-BP-10X FAST Pack

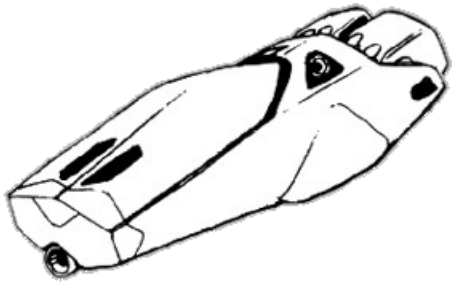
Unlike other dorsal mount FAST packs, this one is a single unit mounted in the middle of the back of the VF-5000. No name designation was found for this particular FAST pack, so I assigned one based on the year available.
VF Used: VF-5000G, VF-5000T-G
First Produced: 2021 [?]

Armor: HS – 5K, SP 5
CP: 43
Weight: 4,000 kg
B-Mod: 1.2
Systems:
HMMM-mk 6 Micro Missile Launcher (x3): +1 WA, Range 32, 3K, Payload: 4 each, 1 Kill each
Overbooster, 12 Kills
Verniers +1

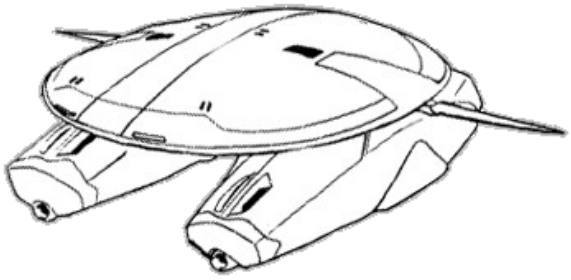
NP-BP-11 FAST Pack
VF Used: VF-11, VF-19, VF-22
First Produced: 2030
Armor: HS – 5K, SP 5
CP: 36.1
Weight: 2,000 kg
B-Mod: 1.2
Systems:
HMMM-mk 6 Micro Missile Launcher (x4): +1 WA, Range 32, 3K, Payload: 4 each, 1 Kill each
Overboosters, 12 Kills
Verniers +1



NP-BP-12 FAST Pack
VF Used: VF-11, VF-19, VF-22
First Produced: 2040
Armor: HS – 5K, SP 5
CP: 49.5
Weight: 2,000 kg
B-Mod: 1.2
Systems:
HMMM-mk 6B Micro Missile Launcher (x2): +1 WA, Range 32, 3K, Payload: 12 each, 2 Kills each
Overboosters, 12 Kills
Verniers +1



NR-BP-E7 FAST Pack
This is a pair of NP-BP-12 FAST packs with advanced sensors sandwiched between them.
VF Used: VF-11, VF-19, VF-22
First Produced: 2038
Armor: HS – 5K, SP 5
CP: 107 for the set
Weight: 5,000 kg for the set
B-Mod: 2.5



Systems:

HMMM-mk 6B Micro Missile Launcher (x4): +1 WA, Range 32, 3K, Payload: 12 each, 2 Kills each

Advanced Sensor Suite: 10 spaces, 4 Kills

Contains – Advanced Sensors, Radio/Radar Analyzer, Spotting Radar, Target Analyzer, Resolution Enhance 10x. Doubles the number of targets the combat computer can track.

Overboosters, 12 Kills each

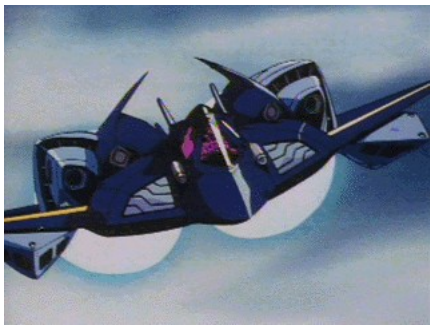
Verniers +2

NP-BP-17 FAST Pack

This must be bought as a matched set. This is a specially designed set of packs with the same passive stealth technology as the VF-17 they were designed for.

VF Used: VF-17

First Produced: 2040



Armor: HS – 5K, SP 5

CP: 58 each

Weight: 2,500 kg each

B-Mod: 1.2 each

Systems:

Particle Beam Cannon: +1 WA, Range 24, 5K, Payload: Unlimited, 5 Kills, 3 spaces, 11 CP, Phalanx Variable

Overboosters, 12 Kills

Verniers +1, Passive Stealth

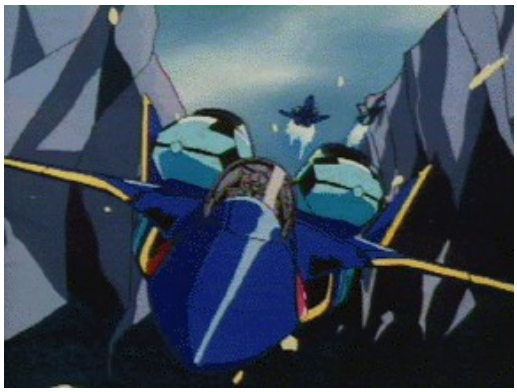
Streamlined for reentry

NP-BP-19 FAST Pack

This must be bought as a matched set. This particular FAST Pack will soon be the standard issue for all VF-11, VF-19 and VF-22 units.

VF Used: VF-11, VF-19, VF-22

First Produced: 2045



Armor: MW – 6K, SP 6
CP: 49.2 each
Weight: 5,000 kg each
B-Mod: 1.2 each
Systems:

HMMM-mk 7 Micro Missile Launcher (x2): +1 WA, Range 32, 3K, Payload: 15 each, 3 Kills each

Overboosters, 12 Kills

Verniers +1

Streamlined for reentry

NP-BP-19-SES FAST Pack

This must be bought as a matched set. All stats indicate a pair. While the SES is included in the Sound Boosters (see below), this unit is not to be confused with the Sound Booster, which was developed from the SES. If either side pod is destroyed, the SES cannot function. Unlike other FAST packs, this pair is usually fixed to the VF-1D Custom as a permanent part of the chassis.
VF Used: VF-11, VF-19, VF-22S [VF-11D Jammingbird is typical]
First Produced: 2046
Armor: HS – 5K, SP 5, DC 4, Beta Armor
CP: 70 each
Weight: 6,100 kg each
B-Mod: 1.2 each

Systems:

HMMM-mk 7 Micro Missile Launcher (x2): +1 WA, Range 32, 3K, Payload: 15 each, 3 Kills each

Includes SES, loudspeaker (300 decibels), and Sound Booster systems.

Overboosters, 12 Kills

Verniers +1

Streamlined for reentry

AP-SF-01 Aegis Pack

This is a single FAST pack designed for the VF-25 series, and has a matching ventral ELINT fin. The ELINT fin can detect targets via fold waves within a one lightday range while in space.

VF Used: RVF-25
First Produced: 2059
Armor: HS – 5K, SP 5 (FAST pack); STR – 3K, SP 3 (ELINT fin)
CP: 130 for the set
Weight: 5,500 kg for the set (esitmate based on similar equipment)
B-Mod: 1.0
Systems:

Advanced Sensor Suite: 10 spaces, 4 Kills

Contains – Advanced Sensors, Radio/Radar Analyzer, Spotting Radar, Target Analyzer, Resolution Enhance 2048x, Fold Wave Sensor. Doubles the number of targets the combat computer can track.

ELINT fin increases the range of all sensors to 518,400,000 hexes (25,920,000km).

Overbooster, 12 Kills

Verniers +2

VF-25 Wing Packs

The VF-25 can mount a pair of "dorsal" FAST packs on the wings near where they connect to the fuselage, with connectors to the shoulders to accommodate its wing configuration in all three modes. These must be purchased in a matched pair, and may be used in conjunction with the AP-SF-01 Aegis dorsal pack.

VF Used: VF-25
First Produced: 2059
Armor: HS – 5K, SP 5
CP: 38 CP each
Weight: 1,700 kg each (guess based on similar equipment and advanced miniaturization)
B-Mod: 1.2 for the pair
Systems:

Micro Missile Launcher: +1 WA, Range 32, 3K, Payload: 24 each, 5 Kills each

Overboosters, 12 Kills

Verniers +1

SAP FAST Pack

VF Used: VF-O-1A
First Produced: 2010
Armor: HS – 5K, SP 5
CP: 78 CP
Weight: 5,200 kg
B-Mod: 0.5
Systems:

Micro Missile Launcher (x2): +1 WA, Range 32, 3K, Payload: 8 each, 3 Kills each

Overbooster, 12 Kills

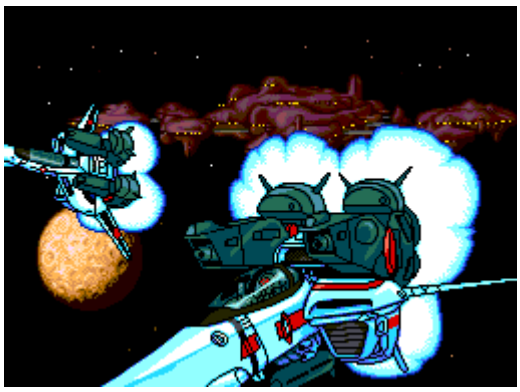
Verniers +1

Streamlined for reentry

Note: This is a single central mount dorsal pack.

SAP-I FAST Pack
VF Used: VF-1JX
First Produced: 2010
Armor: HS – 5K, SP 5
CP: 171.9 CP
Weight: 6,500 kg
B-Mod: 1.2
Systems:
100mm Autocannon: +1 WA, Range 24, 5K, 5 Kills, 3 spaces, BV3, All Purpose, 101.9 CP
Ammunition: 40 bursts, AP, 2 spaces, 2K, 60 CP
Overboosters, 12K
Verniers +1

SAP-II FAST Pack



Upgraded FAST Pack pair for the -R upgrade in 2030's. The thrusters are on a hinge to provide better directional control.
VF Used: VF-1-R
First Produced: 2030
Armor: HS – 5K, SP 5
CP: 171.9 CP
Weight: 6,500 kg
B-Mod: 1.2
Systems:
100mm Autocannon: +1 WA, Range 24, 5K, 5 Kills, 3 spaces, BV3, All Purpose, 101.9 CP [EP-4 Particle Beam Cannon: +1 WA, Range 24, 5K, 5 Kills, 5 spaces]
HMMP-02 Launcher x2: 8 SRM
Ammunition: 40 bursts, AP, 2 spaces, 2 Kills, 60 CP
Overboosters, 12 Kills
Verniers +1
Streamlined for reentry

SAP-III FAST Pack
VF Used: VF-4SP
First Produced: 2020
Armor: HS – 5K, SP 5
CP: 65 CP
Weight: 7,000 kg
B-Mod: 1.3
Systems:
Micro Missile Launcher (x2): +1 WA, Range 32, 3K, Payload: 18 each, 4 Kills each
Overboosters, 12 Kills
Verniers +1

Streamlined for reentry

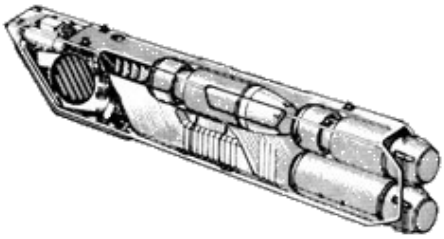
SAP-III-D FAST Pack
VF Used: VF-4SP
First Produced: 2025
Armor: HS – 5K, SP 5
CP: 92 CP
Weight: 8,200 kg
B-Mod: 1.4
Systems:
Beam Cannon: +1 WA, Range 24, 5K, Payload 30, 5 Kills
Micro Missile Launcher (x2): +1 WA, Range 32, 3K, Payload: 9 each, 2 Kills each
Overboosters, 12 Kills
Verniers +1
Streamlined for reentry

Arm Mounted FAST Packs

All arm mounted fast packs are a pair of STR class pods that come as pairs that must be matched (unlike dorsal units that can sometimes be mixed). Arm mount FAST packs do not have verniers to offset the drag. The VF-1 series was the only one to ever see use of arm mounted FAST Packs.

NP-AR-01 FAST Pack

This must be bought as a matched set.



VF Used: VF-1, VF-11
First Produced: 2009
Armor: STR – 3K, SP 3
CP: 13.5 for the pair
Weight: 1,000 kg each
B-Mod: 1 for the pair
Systems:
MRM Launcher: +1 WA, Range 1200, 7K, Payload: 3, 2 Kills

NP-AR-02 FAST Pack

This must be bought as a matched set. This was listed under the VF-1JX entry and had no designation, so I assigned one.
VF Used: VF-1JX
First Produced: 2010
Armor: STR – 3K, SP 3
CP: 87.6 for the pair
Weight: 1,000 kg each
B-Mod: 1 for the pair
Systems:
Micromissile Rack: +1 WA, Range 32, 3K, Payload 18, 4 Kills

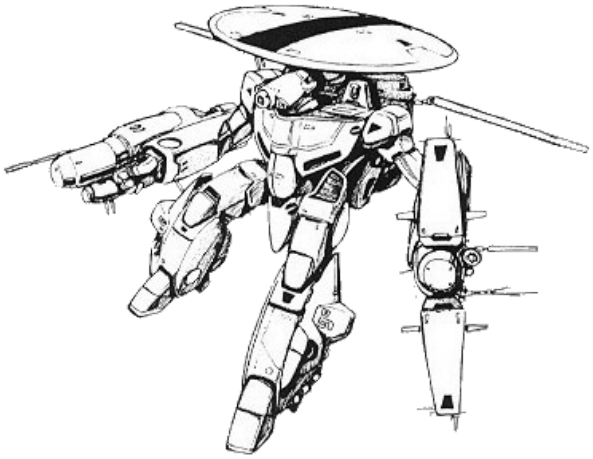
NP-AU-T1 FAST Pack

This must be bought as a matched set. This set of FAST Packs will not explode when severely damaged.
VF Used: VF-1, VF-11
First Produced: 2009
Armor: STR – 3K, SP 3
CP: 12 for the pair
Weight: 1,000 kg each
B-Mod: 1 for the pair
Systems:

Mock combat sensors that register and record "hits" from training weapons.

NR-SR-E3 / NR-SL-E3 FAST Pack

This must be bought as a matched set. All stats indicate a pair.
VF Used: VE-1
First Produced: 2009



VE-1 with NP-FS-E3 FAST Packs

Armor: STR – 3K, SP 3
CP: 154 for the pair
Weight: 2,500 kg each
B-Mod: 2 for the pair
Systems:

Right Arm: ECM/ECCM: Value 4, Radius 6, Beaming 8 - contains missile/radar/sensor jamming and ECCM suites, 4 spaces, 6 Kills

Left Arm: HS class sensors: Range 11 km, Communications 1300 km, 2 Kills

Leg Mounted FAST Packs

All leg mounted Fast packs must be bought in a matched pair, unlike dorsal mounted ones that can be mixed. Leg mounted FAST Packs have verniers to help offset their drag, and usually have flare/chaff dispensers equipped.

Atmospheric Combat Super Parts

This must be bought as a matched set. All stats indicate a pair. This is the predecessor of the traditional FAST pack, designed to give the VF-0 prototypes extra fuel

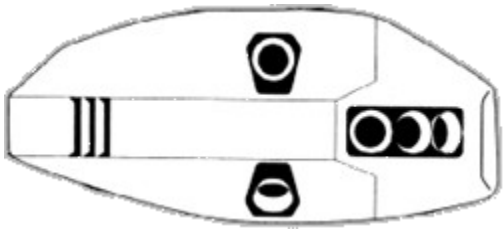
and firepower as well as holding a spare ammo clip in each one. Each leg unit holds 500 m of additional fuel payload which can be injected into the main thrusters as needed.
VF Used: VF-0
First Produced: 2008
Armor: STR – 3K, SP 3
CP: 35 for the pair
Weight: 8 tons for the pair
B-Mod: 2 for the pair
Systems:

24 Raytheon Erlikon GH-30B I/IR-guided micro-missiles: +1 WA, Range 32, 3K, 3 Kills each, 20 CP each

Verniers +1, Extra Fuel [+500 km], 1 storage slot for ammo clip

NP-FB-01 FAST Pack

This must be bought as a matched set.



VF Used: VF-1
First Produced: 2009
Armor: STR – 3K, SP 3
CP: 17.6 each
Weight: 2,000 kg each
B-Mod: 1.0 each
Systems:

Each FAST Pack carries 100 MA worth of solid fuel that can be introduced into the VF-1's engines for overthrusting, usable at a rate of +20 MA per turn.

Verniers +1

NP-FB-T1 FAST Pack

This must be bought as a matched set. Typically used for trainer units.
VF Used: VF-1
First Produced: 2009
Armor: STR – 2K, SP 2
CP: 22
Weight: 2,000 kg each
B-Mod: 1.2 each
Systems:

Each FAST Pack carries 200 MA worth of solid fuel that can be introduced into the VF-1's engines for overthrusting, usable at a rate of +20 MA per turn.

Verniers +1

NP-FS-E3 FAST Pack

This must be bought as a matched set..
VF Used: VE-1
First Produced: 2009
Armor: STR – 3K, SP 3
CP: 47.3 each
Weight: 2,000 kg each

B-Mod: 1.0 each
Systems:

Each FAST Pack carries 100 MA worth of solid fuel that can be introduced into the VF-1's engines for overthrusting, usable at a rate of +20 MA per turn.

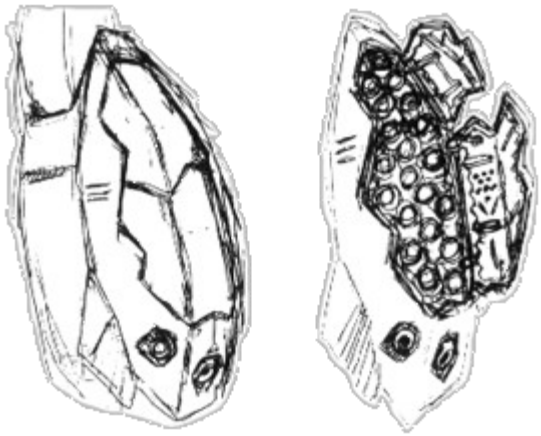
Sensor Boosters: increase the range of all sensors and communications by 25% and gives a 60% chance to detect passive stealth or 20% chance to detect active stealth with the advanced sensors in the dorsal FAST Pack. 2 Kills

Chaff/Flare dispensers: 3K countermissiles, Payload: 48, 7 Kills

Verniers +1

NP-FB-10 FAST Pack

This must be bought as a matched set. As this was developed for the VF-1X Plus, there is no additional fuel in this set.
VF Used: VF-1X
First Produced: 2025



Armor: STR – 3K, SP 3
CP: 16.5 each
Weight: 3,500 kg each
B-Mod: 1.0 each
Systems:

HMMM-mk 4 Micro Missile Launcher: +1 WA, Range 32, 3K, Payload: 20, 4 Kills

Verniers +1

NP-FB-11 FAST Pack

This must be bought as a matched set.
VF Used: VF-11
First Produced: 2030

Armor: STR – 3K, SP 3
CP: 45.8 each
Weight: 4,000 kg each
B-Mod: 1.0 each
Systems:

Each FAST Pack carries 100 MA worth of solid fuel that can be introduced into the VF-1's engines for overthrusting, usable at a rate of +20 MA per turn.

Chaff/Flare dispensers: 3K countermissiles, Payload: 40, 7 Kills
Verniers +1

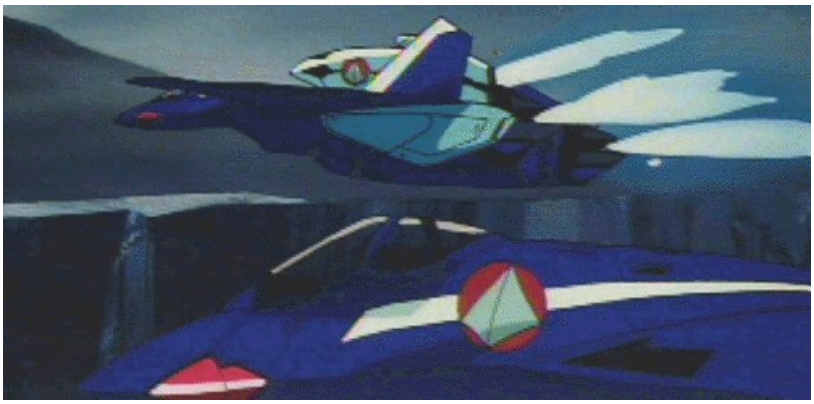
NP-FB-17 FAST Pack

This must be bought as a matched set. The VF-17 must eject these FAST Packs to change out of fighter mode.
VF Used: VF-17
First Produced: 2040

Armor: STR – 3K, SP 3
CP: 20.3 each
Weight: 3,000 kg each
B-Mod: 0.5 each
Systems:
HMMM-mk 4 Micro Missile Launcher: +1 WA, Range 32, 3K, Payload: 16 each, 3 Kills each, 3 space each, 9.6 CP each
Verniers +1, Passive Stealth
Streamlined for reentry

NP-FB-19 FAST Pack

This must be bought as a matched set.
VF Used: VF-11, VF-19
First Produced: 2045



Armor: STR – 3K, SP 3
CP: 26.4 each
Weight: 3,000 kg each
B-Mode: 0.5 each
Systems:

Chaff/Flare dispensers: 3K countermissiles, Payload: 40, 7 Kills
Verniers +1
Streamlined for reentry

Specialty FAST Packs

Some of the Advanced Variable Fighters require special FAST packs to accommodate their unique structures. These are designed as a complete set of all needed FAST Packs.

NP-ARFB-Y1 FAST Augmentation Modules

This is a special set of FAST packs developed with the YF-19 during Project Super Nova. When one of the leg packs is breeched, the VF computer will automatically eject both leg packs and the shoulder armor. The shield is not jettisoned.
VF Used: VF-19
First Produced: 2040

YF-19 FAST Pack Additions

Total CP: 88.9 CP total
Weight: 10,500 kg total
B-Mod: 1.0 total
Streamlined for reentry

Leg Units: 27.2 CP each leg, 3,500 kg each leg
MS – 5K, SP 5, Beta armor, DC 4
SRM Launchers: +1 WA, Range 64, 5K, Payload: 12, 4 Kills
Chaff/Flare dispensers: 3K countermissiles, Payload: 20, 3 Kills
Verniers +1
Shoulder CA: 5 CP each shoulder, 1,000 kg each shoulder
MS – 2K, SP 2, Beta armor, DC 4 (1-4 on d10 hits shoulder CA on arm hit)
Shield: 24.5 CP, replaces standard shield, 1,500 kg
MW – 9K, SP 9, Gamma armor, DC 8, 2 binders for clips, +0 DA

NP-ARFB-Y2 FAST Augmentation Modules

This is a special set of FAST packs developed with the YF-21 during Project Super Nova. When one of the wing packs is breeched, the VF computer will automatically eject both of them. The shields are not jettisoned.
VF Used: VF-22
First Produced: 2040

YF-21 FAST Pack Additions

Total CP: 76.6 CP total
Weight: 7,000 kg total
B-Mod: 1.0 total
Streamlined for reentry

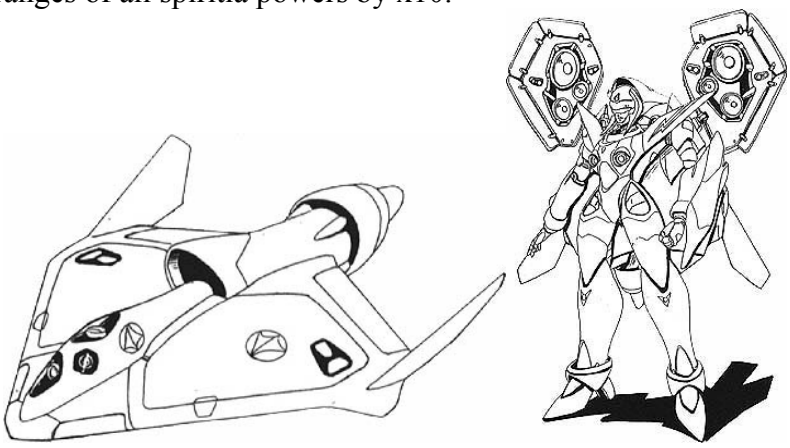
Wing Units: 25.3 CP each wing, 3,000 kg each wing
MS – 5K, SP 5, Beta armor, DC 4
SRM Launchers: +1 WA, Range 64, Dmg 5K, Payload: 12, 4K
Chaff/Flare dispensers: 3K countermissiles, Payload: 20, 3K
Verniers +1
Arm CA: 13 CP each shield, 500 kg per shield
HS – 3K, SP 3, Beta armor, DC 4, +1 DA

Sound Booster & Sound Energy System (SES)
VF Used: VF-19 Kai, VF-17T Kai, VF-11MAXL Kai
Kills: Main Pod 5K, Small Pods 2K
Armor: MS – 5K, SP 5
CP: 75
B-Mod: 1.3

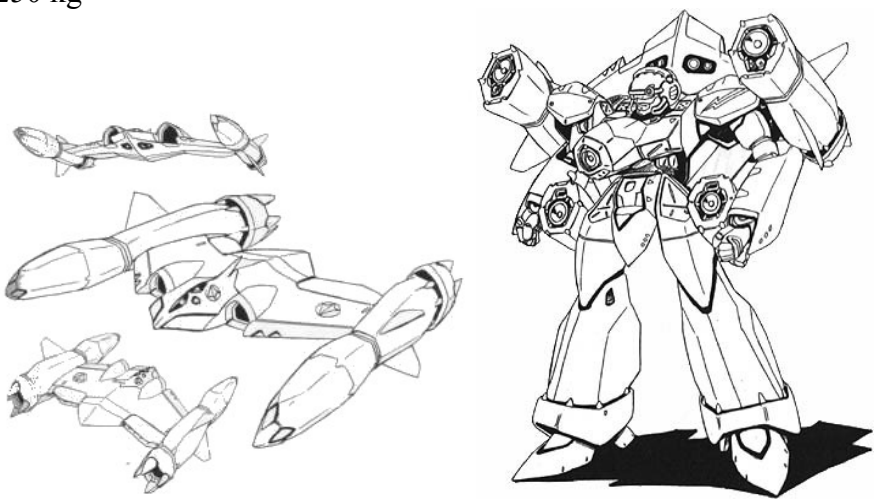
Despite cosmetic differences, the sound booster units consist of a main pod with the thrusters (MA 50) and verniers, as well as most of the equipment; and a pair of smaller pods containing the actual boosters and projectors. The Sound Boosters are a pair of high definition speakers and amplifiers that can amplify the pilot's voice/music up to 600 decibels and transmit on multiple radio and laser communications frequencies simultaneously. The thrusters are for its own flight capability, and does not modify the VF's MA at all. The SES for the Jammingbird units is split between a pair of dorsal

mounted FAST packs rather than a sound booster unit (see above). These are all streamlined for reentry, but must be “closed” into flight mode.

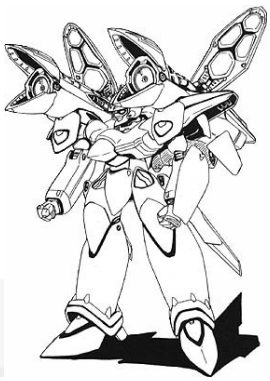
This unit ups the conversion rate of the SEC to 10 spiritia points per 1 spiritia point spent and requires 100 spiritia points to activate. Like the SEC, this stays active until the pilot ceases all spiritia powers. For lower level characters, this will take a few rounds of using the SEC to get enough spiritia generated to empower the SES. This also amplifies the ranges of all spiritia powers by x10.



VF-11MAXL Kai Sound Booster
Length: 10.2m
Width: 10.18m
Weight: 6,250 kg



VF-17T Kai Sound Booster
Length: 15.57m
Width: 18.06m
Weight: 9,200 kg



VF-19 Kai Sound Booster
Length: 11.83m
Width: 15.41m
Weight: 7,800 kg

Super Rocket Booster Sled

The original VF-1 series was not capable of escaping orbit under its own power. A rocket booster was developed that could attach to any VF-1 without FAST packs (except VERF) and be launched from a mobile rail transport (not included in the cost).

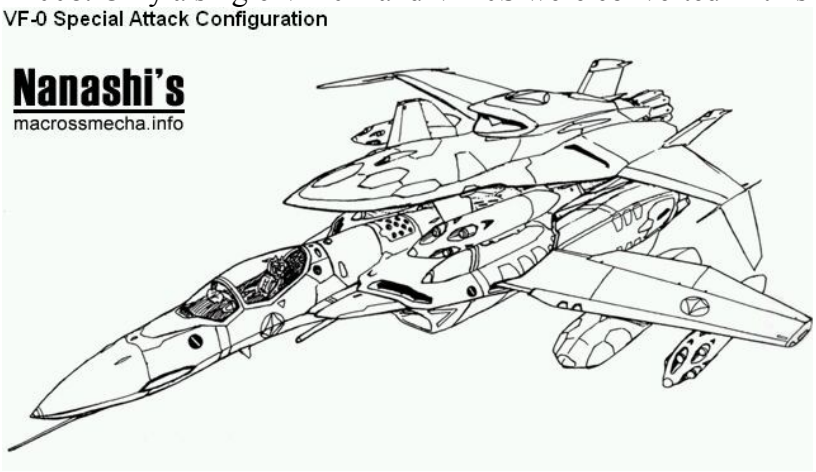
Cost: 350 CP
Length: 13.6m
Width: 4.2m
Height: 9.3m
Weight: 24,500 kg empty (161,200 kg with full fuel and VF-1)
Main Body: 15 Kills with MS armor (SP 5, 5 Kills)
Thrusters: 4x Overbooster (150 MA, +30 MA per turn, 7 Kills)

GBP Systems and FAST Pack Sets

This group includes the GBP (Ground Battle Protector) and other "reactive armor" or "full armor" sets and specific FAST pack loads.

VF-0 "Angel"

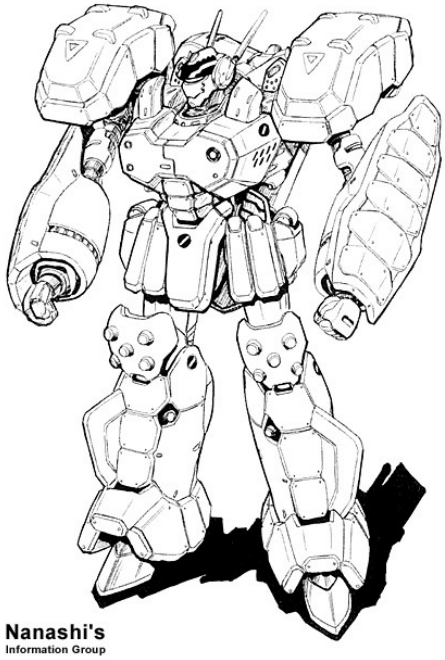
This augmentation was a collection of modified test versions of VF-1 FAST packs and a modified QF-2200 drone to increase the VF-0's fighting power during Operation Iconoclasm in 2008. Only a single VF-0A and VF-0S were converted in this manner.



GBP-0S

Not the official title, but it keeps the different full armors in a group. This is referred to as Reactive Armor System, used by the VF-0 series. The GBP-0S does not carry the amount of weaponry later versions do, but does still provide superior armor and firepower for its time.

VF Used: VF-0



Total CP: 180.5
Weight: 8,000 kg total
B-Mod: 0.7 total

Arm CA:
MW – 4K, SP 4, Alpha Armor, DC 2
Micro Missile Launchers: +1 WA, Range 32, 3K, Payload: 15, 3 Kills
Leg CA:
MW – 4K, SP 4, Alpha Armor, DC 2
Hand Grenades: +0 WA, Range Throw, 5K, Payload 3
Torso CA:
MW – 6K, SP 6, Alpha Armor, DC 2
Micro Missile Launchers (x2): +1 WA, Range 32, 3K, Payload: 10, 2 Kills
Thruster: +10 MA
Verniers [0.5 B-Mod]

GBP-1S

This is the full armor set for the VF-1 series, typically armed on a VF-1J unit. The GBP-1S prevents reentry or transformation, and must be jettisoned for either. The GBP provides 56 micro missiles, 18 short range missiles, and 6 mecha-scale hand grenades as well as almost tripling the mecha's armor.
VF Used: VF-1 (J or S is typical)

Total CP: 430
Weight: 21,800 kg total
B-Mod: 1.7 total

Dorsal Packs:
MS pod with MS armor – 4K, SP 4, Alpha Armor, DC 2
Overboosters +100 MA/+5 per turn, 10 Kills
Verniers [0.5 B-Mod]
Arm CA:
MW – 4K, SP 4, Alpha Armor, DC 2
Micro Missile Launchers: +1 WA, Range 32, 3K, Payload: 11, 2 Kills
SRM Launcher: +1 WA, Range 64, 6K, Payload: 9, 4K
Leg CA:

MW – 4K, SP 4, Alpha Armor, DC 2
Micro Missile Launchers: +1 WA, Range 32, 3K, Payload: 8, 2 Kills
Micro Missile Launchers (rear): +1 WA, Range 32, 3K, Payload: 4, 1 Kill
Hand Grenades: +0 WA, Range Throw, 5K, Payload 3
Verniers [0.2 B-Mod]

Torso CA:

MW – 6K, SP 6, Alpha Armor, DC 2
Micro Missile Launchers (x2): +1 WA, Range 32, 3K, Payload: 5, 1 Kill

GBP-2S

The gerwalk configuration of a variable fighter provides the speed and flight of a fighter with the versatility and mobility of the battroid. One project undertaken by Shinsei Heavy Industries was to create a "full armor" variant for use with the gerwalk. The result came out with mixed results. The new system granted a gerwalk superior protection and firepower for the time, but seriously reduced it speed to the extent that the battroid full armor variant was just as capable. Obviously, the gerwalk must jettison all armor before it can transform.

This system adds armor to all parts of the gerwalk. The top mounts a pair of turret mounted particle beam cannons. Each shoulder mounts a Bifors rocket mount like those used by the Spartan destroid. On the left arm is mounted a double-barrel autocannon. The cockpit gains a heavy armor hatch, which is tied into an additional sensor cluster in the nose of the gerwalk armor so that the pilot suffers no penalties for flying with the canopy covered. This designation is unofficial, and was used to keep in line with other similar full armor variants. The additional weight prevents the mecha from hovering (it can still fly). It was presented to the UN military, but never went past the design phase.

VF Used: VF-1 (J or S typical)

Total CP: 296.7
Weight: 41,100 kg total (59,600 kg with VF-1J 13,250 kg)
B-Mod Total: 1.5

Dorsal Pack

MS pod with MW armor – 6K, SP 6, Alpha Armor, DC 2

PBG-53 Particle Beam Gun: +1 WA, Range 30, 7K, Warmup 1, 7 Kills, Crosslinked
PBG-53 Particle Beam Gun: +1 WA, Range 30, 7K, Warmup 1, 7 Kills, Crosslinked
Target Analyzer

Torso CA
MW – 6K, SP 6, Alpha Armor, DC 2
Turret Mount
STR class sensors: 4 km sensors, 800 km communications, 1 Kill
Verniers [0.5 B-Mod]

Right Arm CA
LH – 5K, SP 5, Alpha Armor, DC 2
Micro Missile Launchers: +1 WA, Range 32, 3K, Payload: 11, 2 Kills

Left Arm CA
LH – 5K, SP 5, Alpha Armor, DC 2
Micro Missile Launchers: +1 WA, Range 32, 3K, Payload: 11, 2 Kills
50mm Autocannon: 3K, Range 24, WA +1, 1 Kill, 3 Space, BV 3, All Purpose, Ammo 20, Crosslinked, Ammo: 3 Kills, 3 Space, AP
50mm Autocannon: 3K, Range 24, WA +1, 1 Kill, 3 Space, BV 3, All Purpose, Ammo 20, Crosslinked, Ammo: 3 Kills, 3 Space, AP

Leg CA
LH – 5K, SP 5, Alpha Armor, DC 2
Boosters (50 MA each, +5 MA per round each) 5 Kills
Verniers [0.3 B-Mod]

Light Armor Type "Dragon Kung-Fu"

The Spartan destroid has a short range and relatively slow over-land speed, causing loss rates above what was planned for Spartan battalions. One proposed answer was to design augmentive armor options to allow a VF-1 to function in the role of a light destroid. The results were good, however, Space War I caused significant losses to available VF units and the program was cancelled.

The light battle armor adds a pair of Astra TZ-III clusters and missile racks, as well as a reinforced spiked knuckle for close combat. The standard GU-11 gunpod is replaced with a mini gunpod designed for close range combat. To transform out of battroid mode, the unit must jettison all parts including the mini gunpod (it won't fit on the standard weapon mount).

VF Used: VF-1 (A typically)

Total CP: 246
Weight: 16,750 kg total
B-Mod: 1.2 total

Arm CA:
- MW – 4K, SP 4, Alpha Armor, DC 2
- Micro Missile Launchers: +1 WA, Range 32, 3K, Payload: 11, 2 Kills
- Left Hand Knuckle Duster: +0 WA, +2K on punch
- SRM Launcher: +1 WA, Range 64, 6K, Payload: 9, 4 Kills
- GU-11 Mini Gunpod: +1 WA, Range 12, 1K, BV 3, Payload 30, 2 Kills

Leg CA:
- MW – 4K, SP 4, Alpha Armor, DC 2
- Right Hip: holster for mini gunpod
- Left Hip Hand Grenades: +0 WA, Range Throw, 5K, Payload 3
- Verniers [0.2 B-Mod]

Torso CA:
- MW – 6K, SP 6, Alpha Armor, DC 2
- Micro Missile Launchers (x2): +1 WA, Range 32, 3K, Payload: 5, 1 Kill
- Astra TZ-III Cluster (x2): 76 CP each
  - Laser – 2K, Range 12
    - 25mm MG – 1K, Range 24, BV4, Ammo 10
      - Ammo: 2.3 CP, 1 Kill, 0 Space
  - 180mm Grenade – 4K, Range 24, Blast 1, Ammo 50
    - Ammo: 64.8 CP, 2 Kills, 1 Space
  - Flamethrower – 2K, Range 1, Incendiary

Heavy Armor Type "Mighty Bird"

This is the second design to allow a VF to function as a destroid. Unlike the light armor type, this adds little extra armor to the VF which would reduce its mobility, but has weapons suited for heavy combat. The gunpod is modified to have an extended payload for longer combat use, and the right arm mounts a six-shot rocket pack like the one found on the Tomahawk. The legs and back mount additional thrusters. To transform out of battroid mode, the unit must jettison all parts except the dorsal and leg packs.

VF Used: VF-1 (A typically)

Total CP: 189
Weight: 13,250 kg total
B-Mod: 1.1 total

Dorsal Packs:

MS pod with MS armor – 4K, SP 4, Alpha Armor, DC 2
Overboosters +100 MA/+5 per turn, 10 Kills
Verniers [0.5 B-Mod]

Arm CA:

MW – 4K, SP 4, Alpha Armor, DC 2
Micro Missile Launchers: +1 WA, Range 32, 3K, Payload: 11, 2 Kills
Left Arm SRM Launcher: +1 WA, Range 64, AP, 6K, Payload: 9, 4 Kills
Right Arm IRM Rack: +1 WA, Range 1200, 7K, Ammo 6, 4 Kills, CP 54.6
GU-11L: +1 WA, Range 24, 1K, BV 3, Ammo 180, 5 Kills

Leg FAST Packs:

Thruster Packs: 50 MA, +10 per round
Verniers [0.2 B-Mod]

High Maneuver Type "Gabriel"

The Gabriel variant was a makeshift attempt to give the VF-1 increased speed and maneuverability in space to increase its survivability. This would eventually lead to the development of the FAST pack series.

VF Used: VF-1 (S typically)

Total CP: 59 (doesn't include 4 LRM)
Weight: 19,000 kg total
B-Mod: -0 total

Dorsal Packs:

MS pod with MS armor – 4K, SP 4, Alpha Armor, DC 2
Overboosters +100 MA/+5 per turn, 10 Kills
Verniers [0.5 B-Mod]

Leg FAST Packs:

Thruster Packs: +50 MA/+5 per turn, 5 Kills
Verniers [0.2 B-Mod]

Long Range Space Type "Deep Diver"

The Valkyrie space conduct time extension is one of the methodological plans for mobility increase. It is different from makeshift "Gabriel" in that it installs option parts which are new designs. Compared to the Fighter form take off that is the basis of Gabriel/Super Valkyrie launching, the Deep Diver launches in Battroid mode. It is not necessary to launch this type in mass numbers, as it this type is used for independent force reconnaissance and patrol.

The gunpod has increased payload and barrel cooling capabilities, allowing it a higher rate of fire and longer combat effectiveness. The thruster FAST packs all have multiple directional nozzles for increased space maneuverability. This variant serves as a precursor to the standard FAST pack augmentation system.

VF Used: VF-1 (J or D typically)

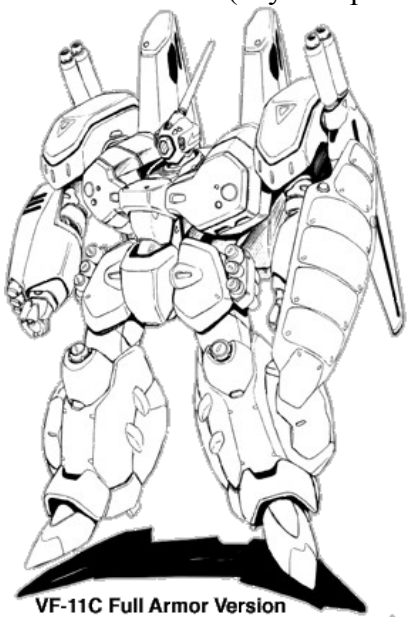
Total CP: 79
Weight: 32,000 kg total
B-Mod: -0 total (has +2 MR in space)

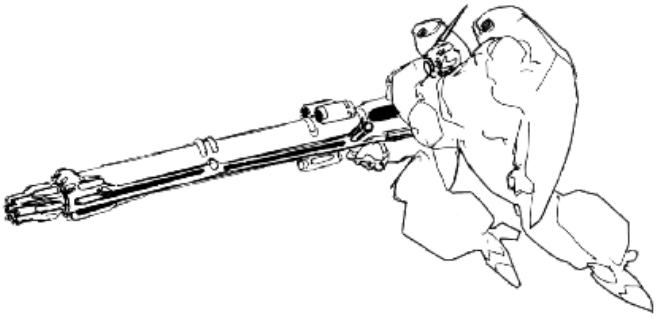
Dorsal Packs:
MS pod with MS armor – 4K, SP 4, Alpha Armor, DC 2
Overboosters +100 MA/+5 per turn, 10 Kills
Verniers [0.5 B-Mod]
Arm CA:
MW – 4K, SP 4, Alpha Armor, DC 2
Thruster Packs: +50 MA/+2 per turn, 5 Kills
Verniers [0.2 B-Mod]
Leg FAST Packs:
MW – 4K, SP 4, Alpha Armor, DC 2
Thruster Packs: +50 MA/+2 per turn, 5 Kills
Verniers [0.2 B-Mod]

GBP-11S

Not an official designation, but this is the full armor developed for the VF-11 series. The GBP provides a superheavy gunpod, additional lasers, a heavy duty shield, and 102 short-range missiles. While equipped with the GBP, the VF-11 cannot use wing hardpoints and must jettison the armor to transform out of battroid mode. A VF-11E or later equipped with this system has as much firepower as an entire battalion of destroids. Referred to as the Protect Armor System. The XS-06 heavy gunpod is only useable in a zero-g environment due to the weight and recoil, as the weapon is almost as big as the VF using it.

VF Used: VF-11 (any except MAXL and Jammingbird)


VF-11C Full Armor Version



Total CP: 1892.77 including all missiles and loaded XS-06
Weight: 11,500 kg total
B-Mod: 1.2 total

Dorsal Packs:
MS pod with HS armor – 5K, SP 5, Beta Armor, DC 4
SRM Launcher (x4 each): +1 WA, Range 64, 6K, Payload: 4, 2 Kills, 1 Spaces, 23.9 CP each
Thrusters 6MA each pack
Verniers [0.3 B-Mod]

Arm CA:
LH – 5K, SP 5, Beta Armor, DC 4
Heavy Beam Cannons (x2 each): +1 WA, 24, 3K, BV2, Payload 10, 3 Kills
Shoulder SRM Launcher (x1 each): +1 WA, Range 64, 6K, Payload: 15, 6 Kills
Forearm SRM Launcher (x1 each): +1 WA, Range 64, 6K, Payload: 3, 1 Kill

Leg CA:
LH – 5K, SP 5, Beta Armor, DC 4
Hip SRM Launcher (x1 each): +1 WA, Range 64, 6K, Payload: 3, 1 Kill
Leg SRM Launcher (x1 each): +1 WA, Range 64, 6K, Payload: 20, 8 Kills
Verniers [0.2 B-Mod]

Torso CA:
LH – 7K, SP 7, Beta Armor, DC 4
Chest SRM Launcher (x2): +1 WA, Range 64, 6K, Payload: 10, 4 Kills
Verniers [0.3 B-Mod]

Heavy Shield:
LH – SP 11, Beta Armor, DC 4, DA +0

XS-06 Heavy Gunpod:
XS-06: +1 WA, Range 30, 3K, BV6, All Purpose, 3 Kills, Armor 3K/SP3, CP 163.8

Ammo: Payload 60, AP, 4 Kills, CP 393.12

GBP-171EX

Again, not an official designation, nor is it really a "super armor pack" like the other systems. It adds armor and maneuvering thrusters to the torso and legs of a VF-171EX. This does not include the cost of the upgraded weaponry.

VF Used: VF-171EX
Total CP: 42.5
Weight: 8500 kg total
B-Mod: 0.3 total

Torso CA:

LH – 7K, SP 7, Beta Armor, DC 4

Leg CA:

LH – 5K, SP 5, Beta Armor, DC 4
Verniers (0.9 B-Mod; 5 per leg)

Shinsei Industries SPS-25S/MF25 Super parts

This set contains 42+ super pack micro-missiles (estimated count), 2 x Bifors CIMM-3A micro-missile launchers pods (3 exit ports per launcher, mounted in forward main boosters, unknown missile count); 2 x Remmington HMM-5A close-in micro-missile CIWS launcher pod (mounted forward dorsal fuselage in Fighter, over shoulders in Battroid mode, 42 x micro-missiles in two launcher pods). Shinsei Industries SPS-25S/MF25 High-maneuverability Super FAST pack system (includes 2 x armored intake units, 2 x armor units for main manipulator, 2 x engine block armored units, groin/hip armor); option of reconnaissance-in-force unit or beam gun or reaction warhead missile container, each can substitute for micro-missile launcher pod.

VF Used: VF-25
CP: ?
Weight: 19,550kg
B-Mod: ?

Arm CA:
LH – 5K, SP 5, Beta Armor, DC 4
Missile Cluster [shoulder]: +1 WA, 3K, Range 32, Payload 24, 8 Kills, CMV, Crosslinked
Leg CA:
LH – 5K, SP 5, Beta Armor, DC 4
Torso CA:
LH – 7K, SP 7, Beta Armor, DC 4
Missile Cluster (x2): +1 WA, 3K, Range 32, Payload 20, 4 Kills, CMV, Crosslinked
Wing CA:
MS pod with HS armor – 5K, SP 5, Beta Armor, DC 4
Missile Cluster: +1 WA, 5K, Range 64, Payload 15, 5 Kills, AP, Crosslinked
Verniers [0.1 B-Mod]
Overboosters: 150 MA, useable 15 MA per round each
Shield:
LH – SP 11, Beta Armor, DC 4, DA +0

Shinsei Industries AP-SF-01+ Super parts

This set contains 42+ super pack micro-missiles (estimated count), 2 x Bifors CIMM-3A micro-missile launchers pods (3 exit ports per launcher, mounted in forward main boosters, unknown missile count); 2 x Remmington HMM-5A close-in micro-missile CIWS launcher pod (mounted forward dorsal fuselage in Fighter, over shoulders in Battroid mode, 42 x micro-missiles in two launcher pods). Shinsei Industries SPS-25S/MF25 High-maneuverability Super FAST pack system (includes 2 x armored intake units, 2 x armor units for main manipulator, 2 x engine block armored units, groin/hip

armor); option of reconnaissance-in-force unit or beam gun or reaction warhead missile container, each can substitute for micro-missile launcher pod.

RADOME and ANTENNA: Radome located on dorsal side in fighter and GERWALK mode; antenna located on the ventral side in fighter mode. Radome detects targets in real-time by fold waves with a maximum detectable distance is approximately one Light-day when deployed in outer space. It can identify up to 2048 targets simultaneously and can guide long to medium-range missiles at 128 targets at the same time. As the RVF-25's onboard computer can only track a limited number of contacts simultaneously, the telemetry from the radome can be transmitted via laser communications to a command ship for further analysis. The radome also contains electromagnetic and visual spectrum sensors for detecting spatial disturbances in the immediate area, such as incoming or outgoing folds or cloaked ships (1-8 on d10 chance of detecting a ship protected by passive stealth, 1-6 on d10 chance with active stealth). Improved for anti-Vajra use by L.A.I. Corporation using fold quartz. It detects targets using fold waves instead of electromagnetic waves. Radome disk uses DSAF-03 electromagnetic wave/fold wave sensor and fold-wave ESF-1000 phased-array radar panel on the ventral side as the core of the system. Radome and Phased array radar panel can be jettisoned if necessary.

Because fold waves are applied to the control scheme, control of QF-4000 Ghost-series is possible at long distances without lag time. Maximum of 6 QF-4000 Ghost-series can be controlled. Fold Communication Guidance system mounted on Super parts.

VF Used: RVF-25
CP: ?
Weight: 19,550kg
B-Mod: ?

Arm CA:

LH – 5K, SP 5, Beta Armor, DC 4

Missile Cluster [shoulder]: +1 WA, 3K, Range 32, Payload 24, 8 Kills, CMV, Crosslinked

Leg CA:

LH – 5K, SP 5, Beta Armor, DC 4

Torso CA:

LH – 7K, SP 7, Beta Armor, DC 4

Missile Cluster (x2): +1 WA, 3K, Range 32, Payload 20, 4 Kills, CMV, Crosslinked

Wing CA:

MS pod with HS armor – 5K, SP 5, Beta Armor, DC 4

Missile Cluster: +1 WA, 5K, Range 64, Payload 15, 5 Kills, AP, Crosslinked

Verniers [0.1 B-Mod]

Overboosters: 150 MA, useable 15 MA per round each

Advanced Sensor Suite: 10 spaces, 4K

Contains – Advanced Sensors, Radio/Radar Analyzer, Spotting Radar, Target Analyzer, Resolution Enhance 512x.

Shield:

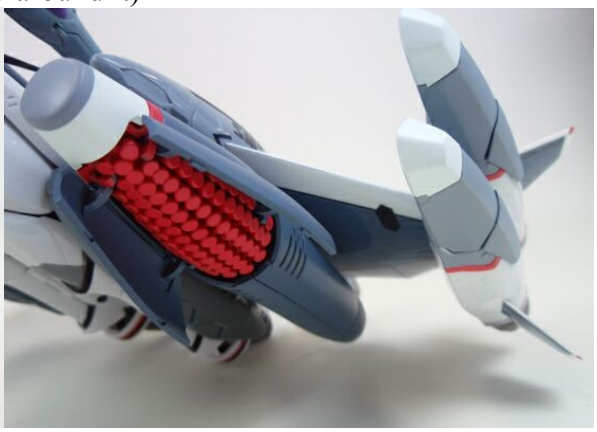
LH – SP 11, Beta Armor, DC 4, DA +0

Shinsei Industries ?? Tornado Pack

Variant FAST Pack for the VF-25 shown in the Macross Frontier: The False Songstress movie. It includes an ROV-E75X swiveling/rotating beam cannon turret, positioned over the shoulders in battroid mode. Beam cannon cooling hatches and FED-115R power capacitor/refrigeration unit deploys to the rear when at low speeds in outer space. Micromissile launchers located on the wings, with additional micro-missile pods for outer space-use.

No official stats are found yet, so these stats are approximated. Based on the pictures of the toy parts, this thing could be carrying several hundred micromissiles. I am assuming the wing thrusters allow it to nearly match the speed of the VF-25 full armor pack, with additional VTOL thrust capability for higher maneuverability.

Missile count: rows of 13 with 3 more at the forward tip, 7 rows are visible (unknown if this has rows going completely around it)



Dorsal Pack:

MS pod with HS armor - 5K, SP 5, Beta Armor, DC 4

ROV-E75X Beam Cannon (x2): +1 WA, 7K, Range 32, 7 Kills, Crosslinked

Wing CA:

Micromissile Cluster: +1 WA, 3K, Range 32, Payload ??, ?? Kills, CMV, Crosslinked

Micromissile Cluster: +1 WA, 3K, Range 32, Payload ??, ?? Kills, CMV, Crosslinked

Overboosters:

Verniers:

Shinsei Industries APS-25A/MF25 Armored Pack

This GBP packs in over 200 micromissiles, active stealth antennae, high powered thrusters, anti-warship beam cannons, two additional pinpoint barrier generators and improved armor. It also incorporates an AI to assist the pilot with tactical needs. Unlike previous full armor systems, this one allows the variable fighter to transform between all three configurations without having to eject the armor. This system was only authorized to the S.M.S. VF-25S unit. In fighter and gerwalk configurations, the VF's PPB is automatically focused on the nose.

VF Used: VF-25S

Total CP: 3001.15 CP

Weight: 31,550 kg total (including 15,000 kg of fuel and 9,000 kg of missiles)

B-Mod: 1.6 total

Arm CA:

LH – 5K, SP 5, Beta Armor, DC 4

Missile Cluster [shoulder]: +1 WA, 3K, Range 32, Payload 38, 8 Kills, CMV, Crosslinked

Leg CA:

LH – 5K, SP 5, Beta Armor, DC 4

Missile Cluster (x2): +1 WA, 3K, Range 32, Payload 16, 3 Kills, CMV, Crosslinked, can fire up to 8 per attack per launcher

ROV-22 Beam MG (x2): +1 WA, 2K, Range 24, BV 3, Crosslinked

Torso CA:

LH – 7K, SP 7, Beta Armor, DC 4

Missile Cluster (x2): +1 WA, 3K, Range 32, Payload 20, 4 Kills, CMV, Crosslinked

Advanced Sensor Package

Active Stealth antennae

AI (Level 5, Portfolio 2: Mecha Gunnery, Tactics)

Wing CA:

MS pod with HS armor – 5K, SP 5, Beta Armor, DC 4
Missile Cluster: +1 WA, 5K, Range 64, Payload 15, 5 Kills, AP, Crosslinked
Verniers [0.1 B-Mod]
Overboosters: 200 MA, useable 20 MA per round each
Pinpoint Barrier in each wing module (total of 3 including the VF-25's)
ROV-22 Beam MG: +1 WA, 2K, Range 24, BV 3, Crosslinked
Beam Cannon: +1 WA, 10K, Range 64, BV 2
Alt Fire: +1 WA, 2K, Range 24, BV 6, Phalanx Variable

Shield:

LH – SP 11, Beta Armor, DC 4, DA +0

Chapter 2 – UN Destroids

Destroids are actually much simpler to setup in Mekton since they aren't overly complicated. Before the actual stats are some of the standard features found on almost all Destroids. UN Spacy did not build any destroids after the end of Space War I, and most of the ones remaining were refitted for construction, had their weapons removed and given to the soldiers who piloted them in the war, or were used as targets for later VF testing.

It is not unreasonable that some colonies still use the Tomahawk, Defender and Spartan destroids for defense. Such units would most likely have undergone several rebuilds over the last 40 years. The destroids saw great popularity with the UN Army and UN Space Marines, both of which continued to use the destroids long after production stopped. Also included in the destroid listing are the UN refitted versions of various Zentran and Meltran mecha and power armor for macronized soldiers.

With the inclusion of mecha and storyline from certain video games, the destroids saw extended use well into the 2040's. The Macross anime (and sequels) focused on the exploits of the UN Space Navy and Space Air Force, so it is easy to see how destroids would not see as much fame. Furthermore, the inclusion of destroids created in certain hobby magazines have been accepted by Studio Nue as "canon" and will be included. All destroids that fall into either of these two groups will be marked as optional.

Pre-OT mecha are "roadstriker" scale in Mekton. Pre-OT weapons they use are listed below at "Mekton" scale CP costs to make it easier to scale down when making custom pre-OT mecha. Pre-OT destroids do not automatically have standard features.

One inconsistency is that the CP is higher on most destroids compared to a variable fighter, yet they were supposed to be cheaper to build and maintain.

Destroid Naming

The first part designates the function of the destroid (ADR, MBR, etc). The second part designates the chassis type (03, 04, 07, etc). The third part is the mark type. The last part is the destroid call sign.

Example: MBR-07-Mk II Spartan. This name indicates a Main Battle Robot with chassis type 07, and is the second destroid type using that chassis. It is designated as the Spartan.

Options

Unless specified by the individual model type, all Destroids have a liftwire, escape pod, anti-theft codelock, storage module, spotlights, nightsight, thermal imager, infrared and homing signal (640 km). All UN mecha also carry portable survival gear including a 3 man tent, cooking gear, radio, 1 week of rations and water, a couple of signal flares and a first aid kit. (7.5 CP)

Environmentals

All Destroids have the following environmental packages: space, desert and arctic (x0.15 multiplier).

Magnetic Foot Locks

Most of the destroid series are equipped with magnetic foot locks which allow them to effectively walk on the outside hull of capital ships without drifting away or needing verniers to push them against the hull. These take no spaces and cost 2 CP.

Self Destruct

This is a system installed in all UN mecha and ships that is used to prevent UN technology from falling into the wrong hands – primarily those of the Anti-UN forces. The self destruct causes the nuclear powerplant to overload and destroy all systems within the frame, and reduce the structure to slag. This system takes up no spaces, costs 5 CP, and has a timer that can be set anywhere from instant to 1 hour. This will instantly kill anyone inside the mecha, and causes 4K damage to all hexes immediately surrounding the one the exploding mecha is in.

Powerplant

Destroids typically have a backup powerplant in addition to their primary one.

Weapon Systems

Most of the destroids carried individualized weapons packages tailored for their role in the UN forces.

Pre-OT Destroid Weapons

12.7mm Machine Gun

Same as in some Astra clusters, but uses pre-OT depleted uranium ammunition. +1 WA, 6d10 Hits, Payload 100, BV 3, AP, Incendiary, Range 2000m, 40 kg, 30 SDP, CP 9

20mm Gatling Cannon

Heavy pre-OT rapid-fire cannon. Has better range than ones mounted on conventional vehicles due to enhancements on the targeting system.
+1 WA, 7d10 Hits, Payload 40, BV 7, Range 600m, 70 kg, 30 SDP, CP 12

Hughes GU-8 55mm Smoothbore Gunpod

The pre-OT design using modern APSSDS (Armor Piercing Spin Stabilized Discarding Sabot) and HESH (High Explosive Squash Head) ammunition.

WA +1, Range 800m, BV 3, 8d10 Hits, AP, Payload 60, CP 18

M21 180mm Recoilless Rifle

Pre-OT heavy cannons similar to those on the HWR series. Has multi-feed with HE, AP and 20 kiloton tactical nuke shells.
WA +0, Range 35 km, Ammo 25, Multi-feed, Long Range, 75 Hits, CP 10
Standard Ammo: 25d10 Hits, CP 1 per shell
Armor Piercing Ammo: 15d10 Hits, AP, CP 4 per shell
Tactical Nuclear Ammo: 50d10 Hits, Nuclear, Blast 5 (125m), CP 1000 per shell

Raytheon LSSN-10G Tri-Barrel Rocket Launcher

Pre-OT version of the Raytheon tri-missile launcher used on the HWR Mk II.
WA +1, Range 3 km, 8d10 Hits, Blast 1 (50m), Payload 30 per arm launcher, 75 Hits, CP 7

M41 80mm Rocket Launcher

Mounted on pre-OT Earth Trekker series mecha. Can be loaded with HE warheads or M97 fragmentation warheads.
WA +1, Range 50 km, Multi-feed, Payload 20, Launchers 50 Hits, CP 19
HE Warhead: 12d10 Hits, AP, CP 0.5 per shell
M97 Warhead: 8d10 Hits, Blast 2 (100m), CP 3 per shell

Scorpion Missile

This is a missile used by many aircraft to hunt lightly-armored targets. It is infrared guided, and can be confused by chaff.
WA –1, 7d10 Hits, AP, Range 85 km, Payload 2, 15 kg, 20 SDP, CP 5.5 per missile

AIM-9X Missile Launcher

Mounts one short-range surface-to-air missile.
WA +1, Range 25 km, 9d10 Hits, Payload 1, 20 kg, 20 SDP, CP 6 per missile

Five-tube 200mm Rocket Launcher

Weapon used on the Dinosaur.
WA +0, Range 10 km, 25d10 Hits, Payload 10, 200 Hits, CP 14

Overtechnology Destroid Weapons

GAU-12 25mm 6-Barrel Anti-Aircraft Gatling Gun

This are the primary weapon arms of the Cheyenne destroid. They have a hand unit mounted on the rear of the “elbow”, which can allow normal use when the gun rotates at that joint to a reverse position. Stocked with APSD ammunition.
Guns – 1K, Range 24, BV6, Ammo 100, All-Purpose, 1 Space, 1 Kill, CP 50
Ammo: 49 CP, 5 Kills, 5 Spaces, AP
Hands – 1K, Range Melee, Quick, Handy, 1 Space, 1 Kill

M161A3 35mm 6-barrel "Fiddle" Gatling Gun

+1 WA, 2K, Range 24, BV6, Ammo 75, All-Purpose, 2 Spaces, 2 Kills, CP 109.2
Ammo: Clip 75, AP, Tracer, 3 Spaces, 5 Kills, 121.5 CP

Howard SHIN-SHM-10 Derringer SRM Launcher
5K, Range 64, Ammo 22, 7 Spaces, 7 Kills, CP 22 +128.7 for missiles

Bifors 9-Rocket Close-In Self-Guided Launchers
Used on the Masamune
5K, Range 64, Ammo 9, 4 Kills, 4 Spaces, CP 26.3

Bifors 12-Rocket Close-In Self-Guided Launchers
Used by both the Tomahawk and the Sparta/Spartan.
5K, Range 64, Ammo 12, 4 Kills, 4 Spaces, CP 35.1

Erlikon Anti-Aircraft Self-Guided Missile Pack
7K, Range 1200, Ammo 6, 4 Kills, 4 Spaces, CP 54.6

Mauler RQV-10 AA Laser
2K, Range 24, BV2, WA +1, 2 Kills, 1 Space, CP 12.5

Mauler PBG-10
10K, Range 60, Warmup 1, Payload 2, WA +1, 10 Kills, 1 Space, CP 30

Mauler PBG-11
10K, Range 60, Warmup 1, WA +1, 10 Kills, 2 Spaces, CP 48

Mauler PBG-11E
10K, Range 75, Warmup 1, WA +1, 10 Kills, 2 Spaces, CP 52

Mauler PBG-12
Optional weapon mount for the Cheyenne II.
12K, Range 75, Warmup 1, WA +1, 12 Kills, 2 spaces, CP 60

Mauler PBG-15
Extended range particle beam cannon used on the Monster Mk II-G and the Goblin II.
15K, Range 127^2, Warmup 1, WA +1, 15 Kills, 2 Spaces, CP 169.1

50mm Autocannon
2K, Range 24, WA +1, 2 Kills, 2 Spaces, BV 3, All Purpose, Ammo 20, CP 28.6
Ammo: 22.8 CP, 1 Kill, 0 Space, AP

Ramington M-89 12.7mm Air-Cooled Machinegun
1K, Range 12, BV4, Ammo 10, All-Purpose, 1 Kill, 1 Space, CP 13.5
Ammo: 1.9 CP, 1 Kill, 0 Space, AP

Raytheon LSSN-20G Tri-Barrel Rocket Launcher
12K, Range 113^2 (12,800), Ammo 6, Blast 3, +1 WA, Fire volleys of 1-3 per shot, Long Range, 5 Spaces, 5 Kills, CP 254
Ammo: 380 CP, 5 Kills, 3 Spaces

Viggers 120mm Direct-fire Mortar
Used on the Masamune.
5K, Range 32, Ammo 35, Blast 1, +1 WA, 5 Kills, 5 Spaces, CP 210

Viggers 150mm Cannon
Used on the Goblin II.
5K, Range 480, Ammo 20, +0 WA, 5 Kills, 2 Spaces, CP 155

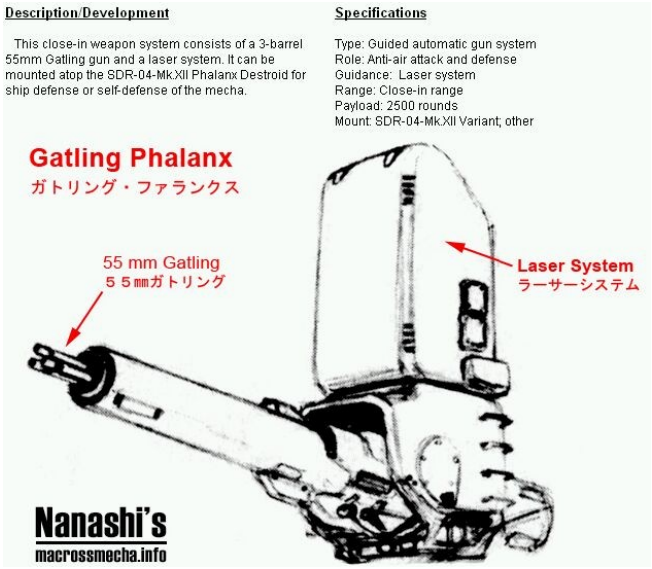
Viggers 20cm Cannon
7K, Range 1200, Ammo 10, Long Range, +1 WA, 7 Kills, 1 Space, CP 167.6
Ammo Bin 2K, Multi-feed, 1 Space
Standard Ammo: 6.7 CP per shell, AP
Howitzer Ammo: 10 CP per shell, Blast 1
Anti-Aircraft Ammo: 6.7 CP per shell, +3 WA against aircraft
Reaction Ammo: 13,408 CP per shell, Blast 2, Nuclear

Viggers 40cm Cannon
The Monster Mk I is armed with 50cm cannons, although they are statistically the same; the MK II has more efficient ammunition to get the same damage yield with a smaller warhead.
15K, Range 127^2 (16,080), Ammo 7 to 10, Long Range, +1 WA, 15 Kills, 2 Spaces, CP 261, Ammo Bin 4K, Multi-feed, 1 Space
Standard Ammo: 10.7 CP per shell, AP
Howitzer Ammo: 16 CP per shell, Blast 1
Anti-Aircraft Ammo: 10.7 CP per shell, +3 WA against aircraft
Reaction Ammo: as per RMS-1 missile

Viggers Rail Cannon
This is an upgrade to the Viggers series of main weapons for use with the VB-6, which is based on the Monster Mk II chassis. The weapon has the same power, but with smaller firing equipment, allowing the mecha a greater payload of ammunition.
15K, Range 127^2 (16,080), Ammo 30, Long Range, +1 WA, 15 Kills, 2 Spaces, CP 275, Ammo Bin 4K, 1 Space

30mm Vulcan Anti-Aircraft Gun
2K, Range 24, BV4, +1 WA, Ammo 100, All-Purpose, CP 52
Ammo: 212 CP, 5 Kills, 3 Spaces, AP

55mm Tri-barrel Gatling Gun
Optional weapon that can be mounted on the top of a Phalanx in place of the tri-level searchlight. It is similar to the GU-11 used by VF units.


Description/Development
This close-in weapon system consists of a 3-barrel 55mm Gatling gun and a laser system. It can be mounted atop the SDR-04-MkXII Phalanx Destroid for ship defense or self-defense of the mecha.
Specifications
Type: Guided automatic gun system
Role: Anti-air attack and defense
Guidance: Laser system
Range: Close-in range
Payload: 2500 rounds
Mount: SDR-04-MkXII Variant; other
Gatling Phalanx
ガトリング・ファランクス
55 mm Gatling
５５㎜ガトリング
Laser System
ラーサーシステム
Nanashi's
macrossmecha.info

3K, Range 24, BV3, +1 WA, 3 Kills, 3 Spaces, All-Purpose, CP 70.2
Ammo: +280 CP, Payload 100, 4 Kills, AP

Astra-I Gun Cluster

The Astra-I cluster is designed to be a close combat anti-personnel weapons package. As such, all of the weapons mounted have the "anti-personnel variable" trait. These weapons are mated into a single weapon system. CP 126.4, 2 Spaces

12.7mm MG – 1K, Range 12, BV4, Ammo 20
Ammo: 1.9 CP, 1 Kill, 0 Space, AP
12.7mm MG – 1K, Range 12, BV4, Ammo 20
Ammo: 1.9 CP, 1 Kill, 0 Space, AP
12.7mm MG – 1K, Range 12, BV4, Ammo 20
Ammo: 1.9 CP, 1 Kill, 0 Space, AP
12.7mm MG – 1K, Range 12, BV4, Ammo 20
Ammo: 1.9 CP, 1 Kill, 0 Space, AP
180mm Grenade – 4K, Range 24, Blast 1, Ammo 50
Ammo: 64.8 CP, 2 Kills, 1 Space

Astra-II Gun Cluster

The Astra-II cluster is designed to be a close combat anti-personnel weapons package. As such, all of the weapons mounted have the "anti-personnel variable" trait except the particle beam gun. These weapons are mated into a single weapon system. CP 85, 2 Spaces

Laser – 2K, Range 12
25mm MG – 1K, Range 24, BV4, Ammo 10
Ammo: 2.3 CP, 1 Kill, 0 Space
180mm Grenade – 4K, Range 24, Blast 1, Ammo 50
Ammo: 64.8 CP, 2 Kills, 1 Space
Particle Beam Gun – 5K, Range 36, Warmup 1

Astra-III Gun Cluster

The Astra-III cluster is designed to be a close combat anti-personnel weapons package. As such, all of the weapons mounted have the "anti-personnel variable" trait. These weapons are mated into a single weapon system. CP 76, 2 Spaces

Laser – 2K, Range 12

25mm MG – 1K, Range 24, BV4, Ammo 10

Ammo: 2.3 CP, 1 Kill, 0 Space

180mm Grenade – 4K, Range 24, Blast 1, Ammo 50

Ammo: 64.8 CP, 2 Kills, 1 Space

Flamethrower – 2K, Range 1, Incendiary

Astra-IV Gun Cluster

The Astra-IV cluster is designed to be a close combat anti-personnel weapons package. As such, all of the weapons mounted have the "anti-personnel variable" trait. These weapons are mated into a single weapon system. CP 101, 2 Spaces

Laser – 2K, Range 12

12.7mm MG – 1K, Range 12, BV4, Ammo 10

Ammo: 1.9 CP, 1 Kill, 0 Space, AP

32mm MG – 2K, Range 24, BV4, Ammo 10

Ammo: 3 CP, 1 Kill, 0 Space

180mm Grenade – 4K, Range 24, Blast 1, Ammo 50

Ammo: 64.8 CP, 2 Kills, 1 Space

Flamethrower – 2K, Range 1, Incendiary

Erlikon 70mm Type 943 Liquid-Cooled High-Speed Autocannon "Contraves"

4K, Range 40, BV4, Ammo 100, All-Purpose, +1 WA, 2 Kills, 2 Spaces, CP ??

Ammo: ?? CP, 5 Kills, 2 Spaces, AP

Erlikon 78mm Type 966 Liquid-Cooled High-Speed Autocannon "Contraves II"

4K, Range 40, BV4, Ammo 100, All-Purpose, +1 WA, 3 Kills, 3 Spaces, CP ??

Ammo: ?? CP, 5 Kills, 2 Spaces, AP

CH2-TYPED Claw Hand

5K, Range 0, AP, Handy, +1 WA, 5 Kills, 3 Spaces, 12 CP

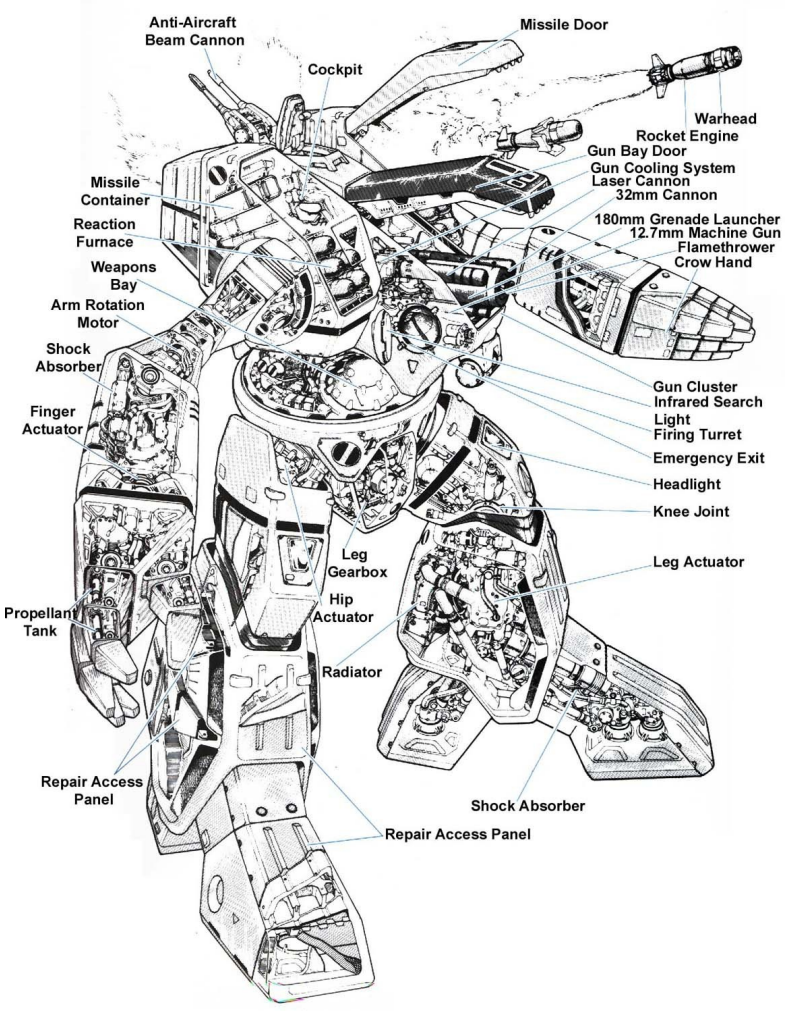
Battle Mace

This close combat weapon is also used by VF-1 units assigned to riot control or Zentraedi suppression. Macronized Zentraedi also favor them when they can capture any.

+2K, Range 0, 2 Kills, Handheld, 4 CP

UN Spacy Destroids

ET Series: Spider, Tarantula, Black Widow, Scorpion
MBR Series: Tomahawk, Spartan, Masamune, Cheyenne, Dehawk, Goblin II
HBR Series: War Monster
SDR Series: Phalanx, Maverick
ADR Series: Defender, Super Defender, Matador, Cheyenne
HWR Series: Monster
DTR Series: Dinosaur
Zentraedi Series: Regult, Glaug, Nousjadeul-Ger, Queadlunn-Rau, Raulon-Ve, Queadlunn-Rae, Queadlunn-Quilqua



ET Series

In the mid to late 1990's, the manufacturers of ground armor attempted to switch from tracked vehicles to legged mecha, and according to Viggers, when technology (and vehicles) that were secretly developed as vehicles that were to be deployed in undeveloped areas to work as "public works" machines were discovered by the military, they planned to reroute that technology for weapons use.

As for the walking systems, at first it was thought best to develop animal leg type walking systems that possessed knees that where elevated to walk like humans and animals. But due to numerous difficulties encountered in developing these systems,

development of “bird leg type” walking systems in which the tip of the foot is elevated to walk went ahead in development.

As for the merits of “bird leg type”, we would find that due to the fact that the range of movement of the knee in the “bird leg type” is small compared to the “animal leg type” the required structural mechanics are less complicated and more strength in the joints is possible. Also it is easily possible to structurally strengthen the whole leg assembly and thus it is possible to support a heavy machine weight. Moreover, the range of movement of the center of gravity is limited and thus “bird leg type” walking systems can move at higher speeds.

However, since auto-balancing sensors and gyroscopes were not developed at that point in time, it was not possible to elevate the location of the center of gravity (by design) and this was disastrous since “short leg” system’s uneven terrain maneuvering ability at this point was not so different from “caterpillar track” vehicles. Also speeds that were hoped for couldn’t be achieved and structural retrofits became problematic, and as these weak points became clear, the development of the ET was soon after terminated. These mecha have traditional weapons and armor, and run on a diesel engine.

Also in this series is the WRR-02-Mk II Scorpion, an industrial use ET type that was test-produced alongside the military use ET type, and was the first machine to receive what can be called as “arms”. Even after the production of the ET type ended, it remained for some time in use. There are small numbers that were disposed of or sold to civilians

MBR Series

The MBR (Main Battle Robot) series was actually developed by Stonewell-Bellcom before the VF series. The MBR-04 Tomahawk was the first destroid to enter service in 2009, meant as a mobile weapons platform to combat the alien “giants” on the ground. In 2008 the MBR-07 Spartan enters service, designed for hand-to-hand combat; with a handful of Mk I Sparta units being used before being upgraded to Mk II Spartan units.

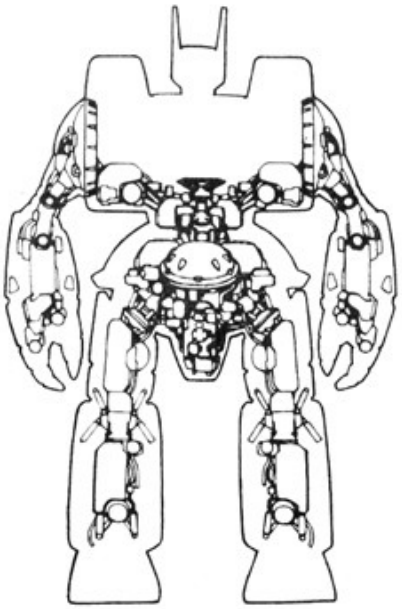
The Dehawk is a Studio Nue creation that appeared in the Macross: Remember Me game for the PC, based on the Macross storyline. The Dehawk was named after the Dutch air defense missile system Circa 1990’s. It is essentially a Spartan that is refitted with the front weapon bay/cockpit of the Tomahawk, and has the Tomahawk’s particle beam guns mounted on the shoulders. The Dehawk sees use in 2037 and was developed by a joint effort between the Centinental-Kransman Group and Viggers/Chrauler.

The Masamune was built alongside the Cheyenne as a close-combat counterpart. Production was halted in early 2009 so Viggers/Chrauler could focus on war-machine destroids. In 2011, production was restarted. The Masamune could perform admirably well as riot control, construction, patrol and light combat. The Mk II version included an extra pair of machine guns for anti-missile capabilities. There is also a civilian model with no weapons produced for construction mecha. The Masamune was intended as a compromise between the heavier destroids and the quicker variable fighters.

The Goblin II uses the same leg and lower torso assemblies as the Defender. Each arm mounts a pair of 150mm cannons, and the mecha mounts a high-powered particle beam cannon on the shoulder. From its armament, it would likely have been developed for long-range assault and/or anti-spaceship purposes.

Spartan Engine
(Engine and the Drive System)

The Gugenheimer Roy thermonuclear reaction engine (below) and a model drawing of the drive system (right). Because it is a complicated mechanism, problem occurrences were never decreased.



Nanashi's
Information Group

HBR Series

In 2025, the Viggers, Chrauler and Centinental Corporations teamed up to jointly produce a smaller version of the Monster Destroid. The UN military was looking for a smaller mecha capable of providing the devastating artillery support of the larger Monster, but more mobile and well rounded in terms of medium and short range weaponry. The Viggers and Chrauler Corporations brought the technology of the Monster to the table and wanted to combine it with the Centinental Corporations Tomahawk frame. The resulting prototype was new Heavy Battle Robot class code named War Monster.

In December of the next year the prototype rolled out of the Centinental assembly line and underwent trial runs. Unfortunately the frame was woefully inadequate to contain the 4 overhead cannons and the shock they inflict on the mecha's frame. Although capable of devastating frontal assaults, the mecha nearly fell down each time all four cannons were fired. The problems were only magnified when the particle beam cannons were fired in unison. The War Monster's frame sustained damage from repeated falls, and the cannon support assembly experienced shearing damage.

An abortive attempt was made to reinforce the War Monsters chassis and frame. Engineers determined that in order to keep the weight manageable, the cannons would need to be downgraded to 16 cm from 20. Coupled with the shearing damage from the particle beam, this project was shelved with the prototype remaining little more than a curiosity.

ADR Series

The ADR (Air Defense Robot) series consists of the ADR-04 chassis and the Cheyenne. The Defender is armed with 4 long-range rapid-fire autocannons designed for anti-aircraft, which are later upgraded to beam rifles. The ADR is also equipped with an

advanced communications & sensor suite not unlike that of the VE-1 Elintseeker. The Defender often serves as a command unit for groups of mixed destroid units. The ADR is technically part of the MBR series (Mk X).

The Cheyenne was mass-produced and deployed onboard the CVN-99 Asuka II in 2007 as a mobile anti-aircraft mecha. The Cheyenne featured interchangeable arm weapons, capable of mounting either a pair of 6-barrel gatling guns or a pair of 4-shot rocket packs. Unlike later models in the ADR line, the Cheyenne had zip rollers on the feet/legs, thrusters in the back, and hands on the back end of the arm weapons, making it far more versatile than its descendants. However, the Cheyenne uses a gas-turbine engine rather than the micro-scale thermonuclear powerplant. The Macross Quarter has an updated variant in 2059.

The ADR-04 Mk IX Matador was the final pre-production prototype for what would eventually become the ADR-04 Mk X "Defender". A total of ten units were produced from February until March 2009 before the manufacturing lines were switched over for full production of the "Defender" in June. Although, externally the Mk IX and X units appear to have little in common except for the Vickers-Chrysler leg assemblies found on all first generation RDF destroids, all of the internal systems are virtually identical to those on the Defender.

Eventually development of the ADR-04-Mk XV Super Defender brings about a new destroid with the firepower and defense of a destroid with the light weight and mobility of a variable fighter.

SDR Series

The SDR (Space Defense Robot) series includes the Phalanx and the Maverick. In 2009 the SDR-04 Phalanx is developed by the crew of the Macross during their journey home from Pluto to provide the Macross with additional firepower as a mobile missile launcher. As such, the design was never used or manufactured outside the SDF-1.

The Maverick was designed by Studio Nue, but as far as I know, was never actually used in the Macross storyline. The Maverick appears to be a variation of the Phalanx specifically for long-range anti-aircraft and anti-missile capability, and is listed as being developed by the SDF-1 engineering group that developed the Phalanx.

HWR Series

The HWR (Heavy Weapons Robot) series was also created by Stonewell-Bellcom. The Mk II is armed with 4 long-range cannons and a pair of triple-barrel missile launchers, all meant for shooting down shuttles and larger targets. The Monster II enters service in 2009. The Monster II is the biggest mecha ever built by the UN Spacy.

Some records indicate only 6 were built, and one is known to be intact and functioning on City 7 while another was destroyed during Project Supernova in 2040. When the SDF-1 left earth, they had 2 functioning Monsters, and parts to build 3 or 4 more. There was only a single Mk I model built and was in service on the CVN-99 Asuka II in 2007, and was later upgraded to Mk II (the Mk I lacked the arm missile launchers). The Mk II-G has the 40cm cannons replaced with extended-range PBG-11 particle beam cannons.

The Mk III featured additional close-defense weapons and additional C^3 systems (command, control and communications). The Mk IV further increased the armor and

firepower, following the “land battleship” concept. The Mk III and IV both were designed as command units for ground mecha forces. These variants of course break the concept that destroids were phased out of use completely.

The Mk X Star Slam replaces the cannons with an ICBM rail, making the destroid effectively a mobile strike missile platform. It has an uplink to the Eye of God defense network that links the Macross with the entire EDF grid, allowing the mecha to target any hostiles that manage to slip past and enter the atmosphere. The arm weapons are replaced with a shielded missile rack and a dual-barrel particle beam cannon.

DTR Series

The Dinosaur is the only model in this series and was a predecessor to the HWR series. This is a large-scale destroid that was test produced to utilize the heavy payload capability of the “bird-leg” type destroid. It has two racks of five-tube 200mm rocket launchers, as well as others constitute its armament.

Zentraedi Series

After the end of Space War I, there were hundreds of thousands of remaining Zentran and Meltran mecha, and a good amount of macronized pilots. The UN decided to upgrade the armor and systems of these mecha to include them in their defense force. The idea was to leave the macronized Zentraedi with mecha they were familiar with, but had a greater chance of surviving combat. This includes the Regult (and variants), Glaug, Nousjadeul-Ger, Queadlunn-Rau, Queadlunn-Rea, Queadlunn-Quilqua and some Raulon-Ve.

The Queadlunn-Quilqua was the first major upgrade of the Queadlunn series, done by General Galaxy in the mid 2030's. It has a 20% increase in performance, including increased missile capacity. It is generally regarded as the strongest of the series. Unfortunately there is no official information detailing its production and deployment.

The Queadlunn-Rea is largely redesigned by the UN to incorporate human technology as well as features from both the Queadlunn-Rau and Nousjadeul-Ger armors. It is piloted by both Zentran and Meltran macronians.

Destroid List

DTR-03-Mk I Dinosaur

COST: 25.175 CP
Availability: late 1990’s

HEIGHT:
?
WIDTH:
?
LENGTH:
?
WEIGHT:
30,150 kg [?]

Mode	MV	Land MA	Fly MA
Destroid		-2	5 (250m/round) 0

Maneuver Pool +0%

Servo	Class	Hits	Spaces	Armor	SP	Hits	
Torso		MS	300	10	MS	100	100
Right Leg		MS	100	5	MS	100	100
Left Leg		MS	100	5	MS	100	100
Pod		MS	--	8	MS	100	100

Thrusters	Location	MA
None		

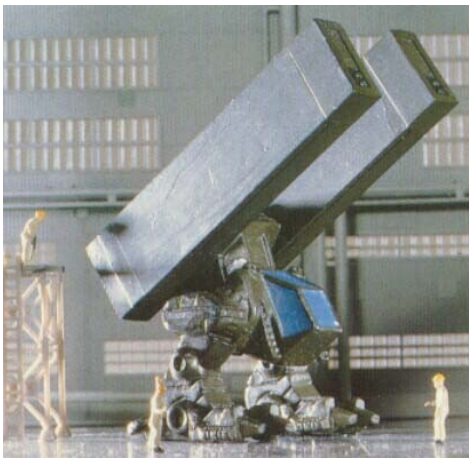
Sensors	Location	Hits	Sensors	Communications
LW	Torso	25	2 km	50 km

Weapon	Location	DMG	Range	WA	Hits	Shots	Notes
5-barrel rocket	Pod	25d10	10km	+0	200	10	Volley 5, Crosslinked
5-barrel rocker	Pod	25d10	10km	+0	200	10	Volley 5, Crosslinked

Optional Systems
Fuel (250 km), Self Destruct

Multipliers
Environmentals (Arctic, Desert), Semi-Monocoque

ET-01-Mk II Spider



COST: 53.1 CP
Availability: late 1990's

HEIGHT:
11.1m
WIDTH:
6m
LENGTH:
8.5m
WEIGHT:
27,200 kg

Mode	MV	Land MA	Fly MA
Destroid	-2	5 (250m/round)	0

Maneuver Pool +0%

Servo	Class	Hits	Spaces	Armor	SP	Hits	
Torso		STR	300	7	STR	75	75
Right Leg		STR	75	4	STR	75	75
Left Leg		STR	75	4	STR	75	75
Missile Pod		LW	--	4	STR	75	75
Missile Pod		LW	--	4	STR	75	75

Thrusters	Location	MA
None		

Sensors	Location	Hits	Sensors	Communications
LW	Torso	25	2 km	50 km

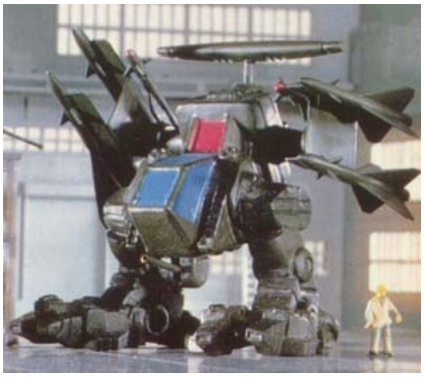
Weapon	Location	DMG	Range	WA	Hits	Shots	Notes
80mm Rocket	Missile Pod	*	50 km	+1	50	20	
80mm Rocket	Missile Pod	*	50 km	+1	50	20	

* HE Warhead: 12d10 Hits, AP
* M97 Warhead: 8d10 Hits, Blast 2 (100m)
* Assume half of each type of shell

Optional Systems
Fuel (153 km), Self Destruct

Multipliers
Environmentals (Arctic, Desert), Semi-Monocoque

ET-01-Mk IV Tarantula



COST: 29.355 CP
Availability: late 1990's

HEIGHT:
?
WIDTH:
?
LENGTH:
?
WEIGHT:
25,200 kg

Mode	MV	Land MA	Fly MA
Destroid	-2	5 (250m/round)	0

Maneuver Pool +0%

Servo	Class	Hits	Spaces	Armor	SP	Hits	
Torso		STR	300	7	STR	75	75
Right Leg		STR	75	4	STR	75	75
Left Leg		STR	75	4	STR	75	75
Missile Pod		LW	--	4	STR	75	75
Missile Pod		LW	--	4	STR	75	75

Thrusters	Location	MA
None		

Sensors	Location	Hits	Sensors	Communications
LW	Torso	25	2 km	50 km

Weapon	Location	DMG	Range	WA	Hits	Shots	Notes
Scorpion Missile	Missile Pod	7d10	80 km	-1	20@	2	
Scorpion Missile	Missile Pod	7d10	80 km	-1	20@	2	
AIM-9X	Missile Pod	9d10	25 km	+0	20	1	
AIM-9X	Missile Pod	9d10	25 km	+0	20	1	
20mm Cannon	Torso	7d10	600m	+1	30	40	BV7

Optional Systems
Fuel (208 km), Self Destruct

Multipliers
Environmentals (Arctic, Desert), Semi-Monocoque

ET-01-Mk V Black Widow

COST: 724.85 CP
Availability: late 1990's

HEIGHT:
9.2m
WIDTH:
8.8m
LENGTH:
6m
WEIGHT:
26,200 kg

Mode	MV	Land MA	Fly MA
Destroid	-2	5 (250m/round)	0

Maneuver Pool +0%

Servo	Class	Hits	Spaces	Armor	SP	Hits	
Torso		STR	300	7	STR	75	75
Right Leg		STR	75	4	STR	75	75
Left Leg		STR	75	4	STR	75	75
Right Arm		STR	75	4	STR	75	75
Left Arm		STR	75	4	STR	75	75

Thrusters	Location	MA
None		

Sensors	Location	Hits	Sensors	Communications
LW	Torso	25	2 km	50 km

Weapon	Location	DMG	Range	WA	Hits	Shots	Notes
180mm Rifle	Torso	*	35 km	+0	75	35	Long Range, Multi-Feed
180mm Rifle	Torso	*	35 km	+0	75	35	Long Range, Multi-Feed
Tri-Missile	Right Arm	8d10	3 km	+1	75	30	Blast 1 (50m), Volley 3
Tri-Missile	Left Arm	8d10	3 km	+1	75	30	Blast 1 (50m), Volley 3

* Standard Ammo: 25d10 Hits
* Armor Piercing Ammo: 15d10 Hits, AP
* Tactical Nuclear Ammo: 50d10 Hits, Nuclear, Blast 5 (125m)
* Assume a payload of 17 standard, 17 AP and 1 tactical nuke per cannon.

Optional Systems
Fuel (168 km), Self Destruct, Weapon Mount

Multipliers
Environmentals (Arctic, Desert), Semi-Monocoque

WRR-02-Mk II Scorpion

COST: 40.47 CP
Availability: late 1990's

HEIGHT:
11.1m
WIDTH:
6m
LENGTH:
8.5m
WEIGHT:
27,200 kg

Mode	MV	Land MA	Fly MA
Destroid	-2	5 (250m/round)	0

Maneuver Pool +0%

Servo	Class	Hits	Spaces	Armor	SP	Hits	
Torso		STR	300	7	STR	75	75
Right Arm		STR	75	4	STR	75	75
Left Arm		STR	75	4	STR	75	75
Right Leg		STR	75	4	STR	75	75
Left Leg		STR	75	4	STR	75	75
Winch		STR	75	3			

Thrusters	Location	MA
None		

Sensors	Location	Hits	Sensors	Communications
LW	Torso	25	2 km	50 km

Weapon	Location	DMG	Range	WA	Hits	Shots	Notes
None							

Optional Systems
Fuel (153 km), Self Destruct

Multipliers
Environmentals (Arctic, Desert), Semi-Monocoque

MBR-04-Mk I

COST: 476.9 CP
Availability: 2001 [?]

HEIGHT:
11.27m to top of main body
WIDTH:
7.9m
LENGTH:
5.1m
WEIGHT:
31,300 kg

Mode	MV	Land MA	Fly MA
Destroid	-2	5 (250m/round)	0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MH	16	20	MH	8	8
Right Arm		MS	5	6	HS	5	5
Left Arm		MS	5	6	HS	5	5
Right Leg		MW	7	9	MW	6	6
Left Leg		MW	7	9	MW	6	6

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
LH Class	Torso	2	20 km	1800 km

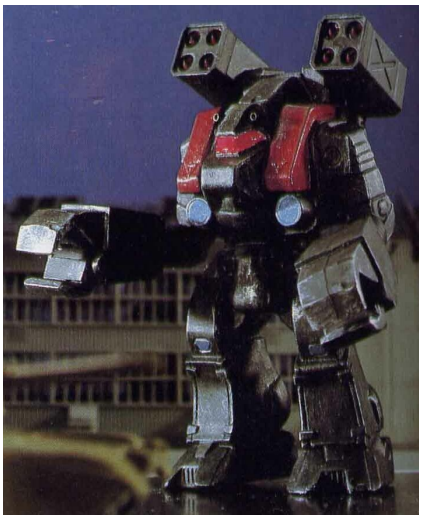
Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	2	Melee	+0	1	U	Quick, Handy
12.5mm MG	Torso	1	12	+0	1	-	BV4, All Purpose, Linked
Ammo					1	10	
12.5mm MG	Torso	1	12	+0	1	-	BV4, All Purpose, Linked
Ammo					1	10	
55mm Rifle	1-handed	1	24	+1	5	100	BV3, All Purpose, Mated
180mm Grenade Launcher		3	12	+0		10	Blast 1

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer,

Multipliers
Environmentals (Arctic, Space, Desert), Verniers (1 Main Body, 2 each Leg), Heavy Hydraulics
Semi-Monocoque

Notes: This is found in a Macross Hobby Magazine, and is entirely optional.

MBR-04-Mk II



COST: 919.15 CP
Availability: 2002 [?]

HEIGHT:
11.27m to top of main body
WIDTH:
7.9m
LENGTH:
5.1m
WEIGHT:
31,300 kg

Mode	MV	Land MA	Fly MA
Destroid	-2	5 (250m/round)	0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MH	16	20	MH	8	8
Right Arm		MS	5	6	HS	5	5
Left Arm		MS	5	6	HS	5	5
Right Leg		MW	7	9	MW	6	6

Left Leg	MW	7	9	MW	6	6
Right Pod	SL		2	STR	3	3
Left Pod	SL		2	STR	3	3

Thrusters	**Location**	**MA**
None		

Sensors	**Location**	**Kills**	**Sensors**	**Communications**
LH Class	Torso	2	20 km	1800 km

Weapon	**Location**	**DMG**	**Range**	**WA**	**Kills**	**Shots**	**Notes**
Claws	Arms	5	Melee	+0	3	U	
12.5mm MG	Torso	1	12	+0	1	-	BV4, All Purpose, Linked
Ammo					1	10	
12.5mm MG	Torso	1	12	+0	1	-	BV4, All Purpose, Linked
Ammo					1	10	
Missile Rack	Right Pod	5	64	+1	1	4	CMV, Linked
Missile Rack	Left Pod	5	64	+1	1	4	CMV, Linked

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer,

Multipliers
Environmentals (Arctic, Space, Desert), Verniers (1 Main Body, 2 each Leg), Heavy Hydraulics
Semi-Monocoque

Notes: This is found in a Macross Hobby Magazine, and is entirely optional.

MBR-04-Mk IV Tomahawk

COST: 637 CP (+140.4 CP for 24x SRM, +1638 CP for 6x IRM)
Availability: 2007 to 201X
Manufacturer: Viggers/Chrauler

HEIGHT:
12.7m with missile rack
11.27m to top of main body
WIDTH:
7.9m
LENGTH:
5.1m
WEIGHT:
31,300 kg

Mode	**MV**	**Land MA**	**Fly MA**
Destroid	-2	5 (250m/round)	0

Maneuver Pool +0%

Servo	**Class**	**Kills**	**Spaces**	**Armor**	**SP**	**Kills**
Main Body	MH	16	20	MH	8	8
Right Arm	MS	5	6	HS	5	5
Left Arm	MS	5	6	HS	5	5
Right Leg	MW	7	9	MW	6	6
Left Leg	MW	7	9	MW	6	6

Pod	SL	2	STR	3	3

Thrusters	**Location**	**MA**
None		

Sensors	**Location**	**Kills**	**Sensors**	**Communications**
LH Class	Torso	2	20 km	1800 km

Weapon	**Location**	**DMG**	**Range**	**WA**	**Kills**	**Shots**	**Notes**
Particle Cannon	Right Arm	10K	60	+1	10	U	Warmup 1
Particle Cannon	Left Arm	10K	60	+1	10	U	Warmup 1
12.5mm MG	Torso	1K	12	+0	1	-	BV4, All Purpose, Linked
Ammo					1	10	
12.5mm MG	Torso	1K	12	+0	1	-	BV4, All Purpose, Linked
Ammo					1	10	
Astra TZ-III	Torso				Mated, Anti-Personnel Variable, Linked		
Laser		2K	12	+1	2	U	
25mm MG		1K	24	+0	1		BV4
Ammo					1	10	
180mm Grenade		4K	24	+0	4		
Ammo					2	40	Blast 1
Flamethrower		1K	2	+0	1	U	Incendiary
Astra TZ-III	Torso				Mated, Anti-Personnel Variable, Linked		
Laser		2K	12	+1	2	U	
25mm MG		1K	24	+0	1		BV4
Ammo					1	10	
180mm Grenade		4K	24	+0	4		
Ammo					2	40	Blast 1
Flamethrower		1K	2	+0	1	U	Incendiary
Missile Rack	Torso	5	64	+1	4	12	CMV, Linked
Missile Rack	Torso	5	64	+1	4	12	CMV, Linked
Anti-Air Missile	Pod	7	1200	+1	3	6	

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks, Semi-Monocoque

Multipliers
Environmentals (Arctic, Space, Desert), Verniers (1 Main Body, 2 each Leg), Heavy Hydraulics

MBR-04-Mk VI-C

COST: 1942.75 CP
Availability: 2008 [?]

HEIGHT:
11.27m to top of main body
WIDTH:
7.9m
LENGTH:
5.1m
WEIGHT:
31,300 kg

Mode	**MV**	**Land MA**	**Fly MA**
Destroid		-2	5 (250m/round) 0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MH	16	20	MH	8	8
Right Arm		MS	5	6	HS	5	5
Left Arm		MS	5	6	HS	5	5
Right Leg		MW	7	9	MW	6	6
Left Leg		MW	7	9	MW	6	6
Pod		MS		4	MS	4	4

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
LH Class	Torso	2	20 km	1800 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
12.5mm MG	Torso	1	12	+0	1	-	BV4, All Purpose, Linked
Ammo					1	10	
12.5mm MG	Torso	1	12	+0	1	-	BV4, All Purpose, Linked
Ammo					1	10	
Missile Rack	Pod	7	1200	+1	7	30	
Can fire in volleys of up to 15.							
Astra TZ-III	Torso				Mated, Anti-Personnel Variable, Linked		
Laser		2K	12	+1	2	U	
25mm MG		1K	24	+0	1		BV4
Ammo					1	10	
180mm Grenade		4K	24	+0	4		
Ammo					2	40	Blast 1
Flamethrower		1K	2	+0	1	U	Incendiary
Astra TZ-III	Torso				Mated, Anti-Personnel Variable, Linked		
Laser		2K	12	+1	2	U	
25mm MG		1K	24	+0	1		BV4
Ammo					1	10	
180mm Grenade		4K	24	+0	4		
Ammo					2	40	Blast 1
Flamethrower		1K	2	+0	1	U	Incendiary
55mm Gunpod	R Arm	3K	24	+1	3		BV3, All-Purpose
Ammo	R Arm					60	Armor Piercing
55mm Gunpod	L Arm	3K	24	+1	3		BV3, All-Purpose
Ammo	L Arm					60	Armor Piercing
Rocket Rack	Pod	7K	1200	+1	14	30	
Can fire in volleys of up to 15.							

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer

Multipliers
Environmentals (Arctic, Space, Desert), Verniers (1 Main Body, 2 each Leg), Heavy Hydraulics
Semi-Monocoque

Notes: This is found in a Macross Hobby Magazine, and is entirely optional.

MBR-04-Mk XV Goblin II

COST: 712.5 CP
Availability: 2010 [?]

HEIGHT:
10.73m to base of particle beam cannon
11.27m total
WIDTH:
8.6m
LENGTH:
4.3m
WEIGHT:
27,100 kg

Mode	MV	Land MA	Fly MA
Destroid	-1	5 (250m/round)	0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MH	16	20	MH	8	8
Right Arm		MS	5	6	MW	6	6
Left Arm		MS	5	6	MW	6	6
Right Leg		MW	7	9	MW	6	6
Left Leg		MW	7	9	MW	6	6
Pod		LW		4	STR	3	3

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
AH Class	Torso	3	30 km	3000 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Particle Beam	Weapon Mount	15K	127^2	+1	15	U	Warmup 1
150mm Cannon	Right Arm	5K	480	+0	5	20	Crosslinked, AP
150mm Cannon	Right Arm	5K	480	+0	5	20	Crosslinked, AP
150mm Cannon	Left Arm	5K	480	+0	5	20	Crosslinked, AP
150mm Cannon	Left Arm	5K	480	+0	5	20	Crosslinked, AP

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod, Weapon Mount
Self Destruct, Combat Computer, Magnetic Foot Locks

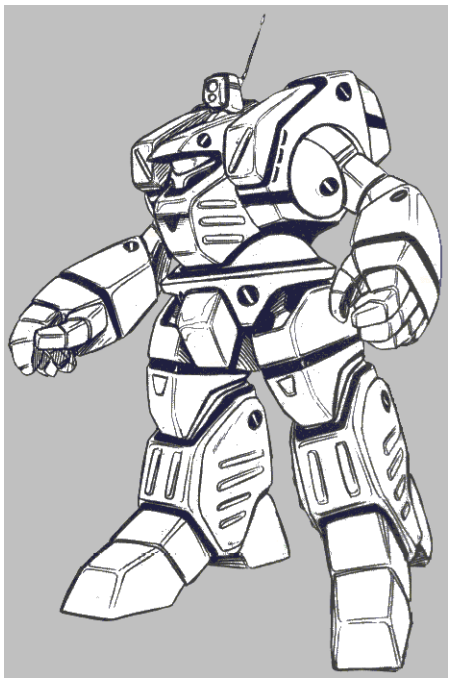
Multipliers
Environmentals (Arctic, Space, Desert), Verniers (1 Main Body, 2 each Leg), Semi-Monocoque

Notes: The Goblin II appears to use the legs and lower torso assembly used by the Tomahawk, and may be intended as a variant of that unit. This is found in a Macross Hobby Magazine, and is entirely optional.

MBR-07-Mk I Sparta

COST: 539.8 CP
Availability: 2007 to 2008

Manufacturer: Centinental/Kransmann



HEIGHT:
11.31m
WIDTH:
8.3m
LENGTH:
6.1m
WEIGHT:
29,400 kg

Mode	MV	Land MA	Fly MA
Destroid		-1	5 (250m/round) 0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MH	16	20	MH	8	8
Right Arm		MS	5	6	MW	6	6
Left Arm		MS	5	6	MW	6	6
Right Leg		MW	7	9	MW	6	6
Left Leg		MW	7	9	MW	6	6
Pod		LW		4	STR	3	3

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
LH Class	Torso	2	20 km	1800 km

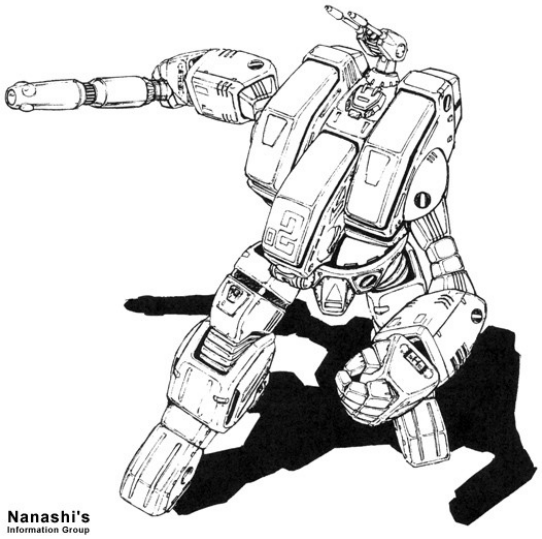
Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
CH2-TYPED	Right Arm	6K	Melee	+0	5	U	AP, Handy
CH2-TYPED	Left Arm	6K	Melee	+0	5	U	AP, Handy
Astra TZ-II	Torso				Mated, Anti-Personnel Variable, Linked		
Laser		2K	12	+1	2	U	
32mm Autocannon		2K	24	+0	2		BV4
Ammo					1	10	
25mm MG		1K	24	+0	1		BV4
Ammo					1	10	
180mm Grenade		4K	24	+0	4		
Ammo					2	40	Blast 1
Particle Beam		5K	24	+1	5	U	Warmup 1
Missile Rack	Torso	5K	64	+1	4	12	CMV, Linked
Missile Rack	Torso	5K	64	+1	4	12	CMV, Linked
GU-11 Gunpod	1 Handed	1K	24	+1	1	U	All-Purpose, BV 3
Ammo						60	Armor Piercing

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks

Multipliers
Environmentals (Arctic, Space, Desert, Underwater), Verniers (1 Main Body, 2 each Leg)
Heavy Hydraulics, Semi-Monocoque

Notes
The Sparta was the early test version of the Spartan, with only a handful built before they were upgraded to Mk II Spartans. Due to the complicated movement systems, there is a -2 penalty to all rolls to jury-rig, repair or modify the Sparta.

MBR-07-Mk II Spartan



COST: 490 CP (+140.5 CP for 24x SRM)
Availability: 2007 to 201X
Manufacturer: Centinental/Kransmann

HEIGHT:
11.31m
WIDTH:
8.3m
LENGTH:
6.1m
WEIGHT:
29,400 kg

Mode	MV	Land MA	Fly MA
Destroid	-1	5 (250m/round)	0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MH	16	20	MH	8	8
Right Arm		MS	5	6	MW	6	6
Left Arm		MS	5	6	MW	6	6
Right Leg		MW	7	9	MW	6	6
Left Leg		MW	7	9	MW	6	6
Pod		LW		4	STR	3	3

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
LH Class	Torso	2	20 km	1800 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
CH2-TYPED	Right Arm	6K	Melee	+0	5	U	AP, Handy
CH2-TYPED	Left Arm	6K	Melee	+0	5	U	AP, Handy
Astra TZ-IV	Torso				Mated, Anti-Personnel Variable, Linked		
Laser		2K	12	+1	2	U	
32mm Autocannon		2K	24	+0	2		BV4
Ammo					1	10	
25mm MG		1K	24	+0	1		BV4
Ammo					1	10	
180mm Grenade		4K	24	+0	4		
Ammo					2	40	Blast 1
Flamethrower		1K	2	+0	1	U	Incendiary
Missile Rack	Torso	5K	64	+1	4	12	CMV, Linked
Missile Rack	Torso	5K	64	+1	4	12	CMV, Linked
Anti-Air Laser	Pod	2K	24	+1	2	U	BV2, Linked
Anti-Air Laser	Pod	2K	24	+1	2	U	BV2, Linked

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks

Multipliers
Environmentals (Arctic, Space, Desert, Underwater), Verniers (1 Main Body, 2 each Leg)
Heavy Hydraulics, Semi-Monocoque

Notes
Due to the complicated movement systems, there is a -2 penalty to all rolls to jury-rig, repair or modify the Spartan.

MBR-07-Mk VI Dehawk

COST: 484.5 CP
Availability: 2037 to 20XX
Manufacturer: Centinental/Kransmann & Viggers/Chrauler

HEIGHT:
11.40m overall height
11.21m to top of main body
WIDTH:
8.3m
LENGTH:
6.3m
WEIGHT:
29,600 kg

Mode	MV	Land MA	Fly MA
Destroid		-1	5 (250m/round) 0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MH	16	20	MH	8	8
Right Arm		MS	5	6	MW	6	6
Left Arm		MS	5	6	MW	6	6
Right Leg		MW	7	9	MW	6	6
Left Leg		MW	7	9	MW	6	6

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
LH Class	Torso	2	20 km	1800 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
CH2-TYPED	Right Arm	6K	Melee	+0	5	U	AP, Handy
CH2-TYPED	Left Arm	6K	Melee	+0	5	U	AP, Handy
Missile Rack	Torso	5K	64	+1	4	12	CMV, Linked
Missile Rack	Torso	5K	64	+1	4	12	CMV, Linked
Particle Cannon	Weapon Mount	10K	60	+1	10	U	Warmup 1
Particle Cannon	Weapon Mount	10K	60	+1	10	U	Warmup 1
12.5mm MG	Torso	1K	12	+0	1	-	BV4, All Purpose, Linked
Ammo					1	10	
12.5mm MG	Torso	1K	12	+0	1	-	BV4, All Purpose, Linked

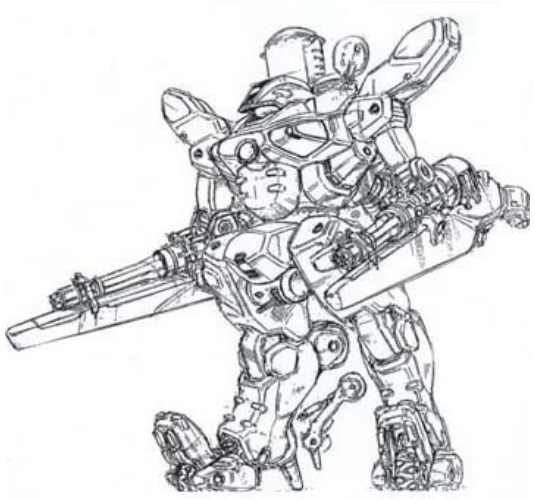
Ammo		1	10

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks, Weapon Mount (x2)

Multipliers
Environmentals (Arctic, Space, Desert, Underwater), Verniers (1 Main Body, 2 each Leg)
Heavy Hydraulics, Semi-Monocoque

Notes
Due to the complicated movement systems, there is a -2 penalty to all rolls to jury-rig, repair or modify the Dehawk.

ADR-03-Mk III Cheyenne



COST: 826 CP (with standard GAU-12 gatling guns)
Availability: 2007 to 2008
Manufacturer: Centinental Corporation/Clansman Corporation

HEIGHT:
9.87m
WIDTH:
?
LENGTH:
?
WEIGHT:
?

Mode	MV	Land MA	Fly MA
Destroid	-3	5 (250m/round)	0
Rollers		10 (500m/round)	

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MH	16	16	ML	7	7
Right Arm		MS	5	5	HS	5	5
Left Arm		MS	5	5	HS	5	5
Right Leg		MS	5	5	HS	5	5
Left Leg		MS	5	5	HS	5	5
Pod		SL		2	STR	3	3

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
LH Class	Torso	2	20 km	1800 km
Backup	Torso	2	1 km	300 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	1K	Melee	+0	1	U	Quick, Handy
AA Gatling Gun	Right Arm	2K	24	+0	2	-	BV3, Linked, All Purpose
Ammo						100	

AA Gatling Gun	Left Arm	2K	24	+0	2	-	BV3, Linked, All Purpose
Ammo						100	
SRM Pack	Right Arm	5K	32	+1	2	6	CMV, Linked
SRM Pack	Left Arm	5K	32	+1	2	6	CMV, Linked
Light MG	Torso	6d6h	12	+1	1	-	BV3, Anti-Personnel
Ammo						25	

* Arms may be mounted with gatling guns -or- 4-shot SRM rack.

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks, Zip Rollers, Fuel (500km)
* Optional 30 minute battery backup with armored housing available on the Asuka II.

Multipliers
Environmentals (Arctic, Space, Desert), Verniers (1 Main Body), Heavy Hydraulics

Notes: The Cheyenne may replace the anti-air gatling gun and rocket pack arms with a pair of four-shot long-range missile racks.

ADR-03-Mk III Cheyenne II

COST: 788 CP (+120 CP for PBG-12, +10 CP for flamethrowers, +1 CP for salute guns; +218.4 CP for missiles)
Availability: 2050's [?]

HEIGHT:
9.87m
WIDTH:
?
LENGTH:
?
WEIGHT:
?

Mode	MV	Land MA	Fly MA
Destroid	-2	5 (250m/round)	0
Rollers		10 (500m/round)	

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MH	16	20	ML/A	7	7
Right Arm		MS	5	6	HS/A	5	5
Left Arm		MS	5	6	HS/A	5	5
Right Leg		MS	5	6	HS/A	5	5
Left Leg		MS	5	6	HS/A	5	5
Pod		SL		2	STR/A	3	3

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
LH Class	Torso	2	20 km	1800 km
Backup	Torso	2	1 km	300 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
6-barrel gatling	Right Arm	2K	24	+1	2		BV6, All Purpose, Linked
6-barrel gatling	Left Arm	2K	24	+1	2		BV6, All Purpose, Linked
Rocket Pack	Right Arm	7K	1200	+1	2	4	Linked
Rocket Pack	Left Arm	7K	1200	+1	2	4	Linked
Light MG	Torso	1K	12	+1	1	-	BV3, Anti-Personnel
Ammo						25	
PBG-17	Arms*	12K	75	+1	12	U	Warmup 1
Flamethrower	Arms *	2K	1	+1	2	20	Incendiary, Anti-Person
Salute Guns	Arms*	2d10S	1	+0	2	20	

* The Cheyenne II can mount one of these options at a time. They are always mounted in matched pairs and are considered crosslinked. The salute guns can inflict 2d10 stun to human-sized targets if they get in the way.

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod, Weapon Mount (arms)
Self Destruct, Combat Computer, Magnetic Foot Locks, Zip Rollers

Multipliers
Environmentals (Arctic, Space, Desert), Verniers (1 Main Body, 1 each Leg, 1 each Arm)
Heavy Hydraulics, Semi-Monocoque

Notes: The Cheyenne II has special hardpoints on the arms to allow different weapon options.

Design Notes: Given that this is a late era model, it would make some sense that it would have some systems found in variable fighters, such as a pinpoint barrier and holographic cockpit. However, the anime and official notes give no mention of this.

ADR-04-Mk IX Matador

COST: 798.48 CP
Availability: 2009, only 10 made
Manufacturer: Viggers

HEIGHT:
10.73m to base of antenna
11.27m total
WIDTH:
8.6m
LENGTH:
4.3m
WEIGHT:
27,100 kg

Mode	MV	Land MA		Fly MA
Destroid		-1	5 (250m/round)	0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MH	16	20	MH	8	8
Right Arm		MS	5	6	MW	6	6
Left Arm		MS	5	6	MW	6	6
Right Leg		MW	7	9	MW	6	6
Left Leg		MW	7	9	MW	6	6
Pod		LW		4	STR	3	3

Thrusters	Location	MA
None		

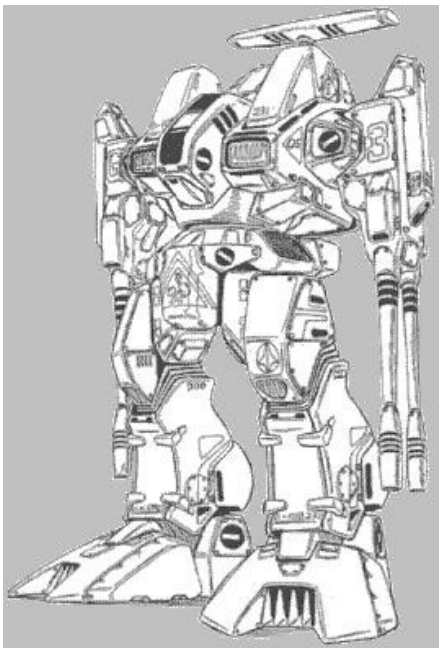
Sensors	Location	Kills	Sensors	Communications
AH Class	Pod	3	30 km	3000 km
Backup	Torso	2	1 km	300 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Contraves	Right Arm	2	40	+1	2	-	BV4, All Purpose, Linked
Ammo	Torso				5	100	AP
Contraves	Left Arm	2	40	+1	2	-	BV4, All Purpose, Linked
Ammo	Torso				5	100	AP

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks, Advanced Sensors, Resolution Enhancement 5x
Spotting Radar, Radio/Radar Analyzer, Target Analyzer, Semi-Monocoque

Multipliers
Environmentals (Arctic, Space, Desert), Verniers (1 Main Body, 2 each Leg)

ADR-04-Mk X Defender



COST: 585 CP (+351 for ammunition)
Availability: 2009 to 201X
Manufacturer: Viggers/Chrauler

HEIGHT:
10.73m to base of antenna
11.27m total
WIDTH:
8.6m
LENGTH:
4.3m
WEIGHT:
27,100 kg

Mode	MV	Land MA	Fly MA
Destroid	-1	5 (250m/round)	0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MH	16	20	MH	8	8
Right Arm		MS	5	6	MW	6	6
Left Arm		MS	5	6	MW	6	6
Right Leg		MW	7	9	MW	6	6
Left Leg		MW	7	9	MW	6	6
Pod		LW		4	STR	3	3

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
AH Class	Pod	3	30 km	3000 km

Backup	Torso	2	1 km	300 km			

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Contraves II	Right Arm	3	40	+1	3	-	BV4, All Purpose, Linked
Ammo	Torso				5	100	AP
Contraves II	Left Arm	3	40	+1	3	-	BV4, All Purpose, Linked
Ammo	Torso				5	100	AP

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks, Semi-Monocoque
Pod: Advanced Sensors, Resolution Enhancement 5x, Spotting Radar, Radio/Radar Analyzer, Target Analyzer

Multipliers
Environmentals (Arctic, Space, Desert), Verniers (1 Main Body, 2 each Leg)

ADR-04-Mk XV Super Defender

COST: 251 CP with no weapon package
Package A: 2x Contraves II (637 CP + 315 CP for ammo)
Package B: 2x M161A3 Gatling Gun (419 CP + 243 CP for ammo)
Package C: 1x Contraves, 1x Gatling Gun (564 CP + 297 CP for ammo)
Availability: ??
Manufacturer: Viggers/Chrauler/General Galaxy

HEIGHT:
10.7m to base of antenna
WIDTH:
8.6m
LENGTH:
4.3m
WEIGHT:
2520 kg

Mode	MV	Land MA	Fly MA
Destroid	-0	6 (30m/round)	0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MH	16	16	MH/A	8	8
Right Arm		MS	5	5	MW/A	6	6
Left Arm		MS	5	5	MW/A	6	6
Right Leg		MW	7	7	MW/A	6	6
Left Leg		MW	7	7	MW/A	6	6
Pod		LW		4	STR/A	3	3

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
AH Class	Pod	3	30 km	3000 km
Backup	Torso	2	1 km	300 km

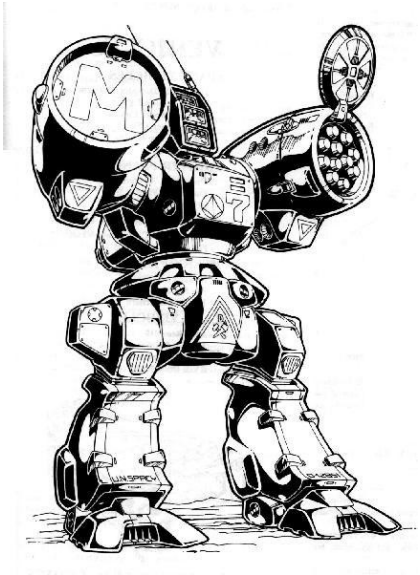
Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Contraves II	Right Arm	3	40	+1	3	-	BV4, All Purpose, Linked
Ammo	Torso				5	100	AP
Contraves II	Left Arm	3	40	+1	3	-	BV4, All Purpose, Linked
Ammo	Torso				5	100	AP
Gatling Cannon	Right Arm	2	24	+1	2	-	BC6, All Purpose, Linked
Ammo	Torso				5	75	AP, Tracer
Gatling Cannon	Left Arm	2	24	+1	2	-	BC6, All Purpose, Linked
Ammo	Torso				5	75	AP, Tracer

** The Mk XV can mount any combination of autocannon or gatling cannon.

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight x2, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks, Flare/Chaff (20@ per arm)
Advanced Sensors, Resolution Enhancement (512x), Spotting Radar, Radio/Radar Analyzer
Target Analyzer, Hardpoints (x4; 2 per arm)

Multipliers
Environmentals (Arctic, Space, Desert), Verniers (1 Main Body, 2 each Leg)

Notes
Upgraded Defender with modern armor materials, reducing weight by 75%. It mounts a newer GRU-53 radar unit. The arms may be quickly swapped between high speed Contraves autocannons or 6-barrel gatling cannons.
The hardpoints typically mount UUM-7 micromissile packs.



SDR-04-Mk XII Phalanx

COST: 207 CP (+257.4 CP for 44x SRM)
Availability: 2009 to 2010
Manufacturer: Macross Onboard Manufacturing Plant

HEIGHT:
12.05m
WIDTH:

10.8m
LENGTH:
5.1m
WEIGHT:
47,200 kg

Mode	MV	Land MA	Fly MA
Destroid	-3	4 (200m/round)	10 (500m/round)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MH	16	20	MW	6	6
Right Arm		MS	5	6	MW	6	6
Left Arm		MS	5	6	MW	6	6
Right Leg		MW	7	9	MW	6	6
Left Leg		MW	7	9	MW	6	6
Pod		LW		4	STR	3	3

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
LH Class	Pod	2	20 km	1800 km
Backup	Torso	2	1 km	300 km

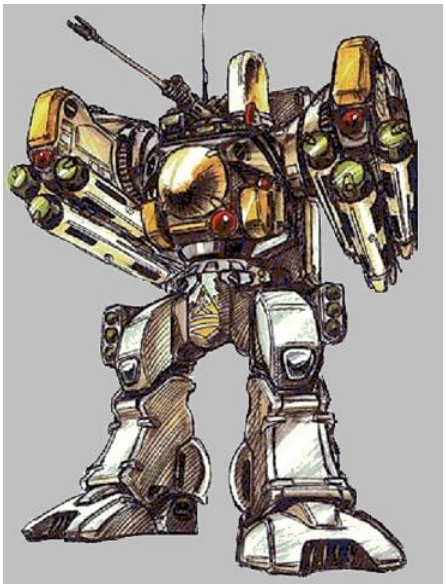
Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
SRM Launcher	Right Arm	5K	64	+1	7	22	CMV, Linked
SRM Launcher	Left Arm	5K	64	+1	7	22	CMV, Linked

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks, Semi-Monocoque
Target Analyzer, Tri-level Searchlight (Infrared, Ultraviolet and White Light)

Multipliers
Environmentals (Arctic, Space, Desert), Verniers (1 Main Body, 2 each Leg)

Notes: Designed onboard the SDF-1 while en route from Pluto to provide the SDF-1 with additional firepower as a mobile missile platform.

SDR-04-Mk XV Maverick



COST: 1312.9 CP
Availability: 2008 to 2009
Manufacturer: Macross Onboard Manufacturing Plant

HEIGHT:
12.7m
WIDTH:
7.9m
LENGTH:
5.1m
WEIGHT:
31,300 kg

Mode	MV	Land MA	Fly MA
Destroid	-3	4 (200m/round)	10 (500m/round)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MH	16	20	MW	6	6
Right Arm		MS	5	6	MW	6	6
Left Arm		MS	5	6	MW	6	6
Right Leg		MW	7	9	MW	6	6
Left Leg		MW	7	9	MW	6	6
Pod		LW		4	STR	3	3

Thrusters	Location	MA
Thruster	Right Arm	5
Thruster	Left Arm	5

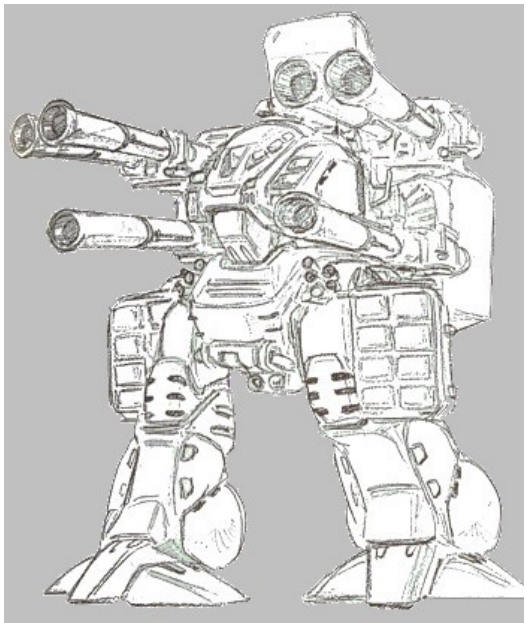
Sensors	Location	Kills	Sensors	Communications
LH Class	Pod	2	20 km	1800 km
Backup	Torso	2	1 km	300 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
LRM Rack	Right Arm	12	16,000	+2	2	3	Blast 2, Linked
LRM Rack	Left Arm	12	16,000	+2	2	3	Blast 2, Linked
SRM Rack	Right Arm	5	64	+1	4	12	CMV, Linked
SRM Rack	Left Arm	5	64	+1	4	12	CMV, Linked
SRM Rack	Right Leg	5	64	+1	1	3	CMV, Linked
SRM Rack	Left Leg	5	64	+1	1	3	CMV, Linked
50mm Gun	Torso	1	24	+1	1	-	BV3, All Purpose
Ammo					2	50	AP

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks, Target Analyzer, Semi-Monocoque
Tri-level Searchlight (Infrared, Ultraviolet and White Light)

Multipliers
Environmentals (Arctic, Space, Desert), Verniers (1 Main Body, 2 each Leg)

Notes: Designed onboard the SDF-1 while en route from Pluto to provide anti-capital ship and anti-missile capabilities. The LRM racks can support other types of long-range missiles such as the RMS-1 Angel of Death.



HBR-02-Mk I War Monster

COST: 1635.9 CP
Availability: 2025, only the prototype was built
Manufacturer: Centinental & Viggers/Chrauler

HEIGHT:
12.7m with missile rack
11.27m to top of main body
WIDTH:
7.9m
LENGTH:

5.1m

WEIGHT:

31,640 kg

Mode	MV	Land MA	Fly MA
Destroid	-2	5 (250m/round)	0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		AH	18	23	MH	8	8
Right Leg		MW	7	9	MW	6	6
Left Leg		MW	7	9	MW	6	6

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
LH Class	Torso	2	20 km	1800 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
PBG-11 Cannon	Torso	10	60	+1	10	U	Warmup 1
PBG-11 Cannon	Torso	10	60	+1	10	U	Warmup 1
20cm Cannon	Torso	7K	1,200	+1	7	-	Linked
Ammo						10	AP, Long Range
20cm Cannon	Torso	7K	1,200	+1	7	-	Linked
Ammo						10	AP, Long Range
20cm Cannon	Torso	7K	1,200	+1	7	-	Linked
Ammo						10	AP, Long Range
20cm Cannon	Torso	7K	1,200	+1	7	-	Linked
Ammo						10	AP, Long Range
Anti-Air Missile	Right Leg	7	1200	+1	3	6	Crosslinked
Anti-Air Missile	Left Leg	7	1200	+1	3	6	Crosslinked

Optional Systems

Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks, Flare Launcher

Multipliers

Environmentals (Arctic, Space, Desert), Verniers (1 Main Body, 2 each Leg), Superheavy Hydraulics

HWR-00-Mk I Monster

COST: 2366.45 CP
Availability: 2007
Manufacturer: Viggers/Centinental

HEIGHT:

22.46m to guns' muzzles

WIDTH:

24m

LENGTH:

41m

WEIGHT:

252,500 kg

Mode	MV	Land MA	Fly MA
Destroid	-6	2 (100m/round)	0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MgH	22	28	MgH	11	11
Right Arm		SH	11	14	MgH	11	11
Left Arm		SH	11	14	MgH	11	11
Right Leg		MgH	12	15	MgH	11	11
Left Leg		MgH	12	15	MgH	11	11
Pod		MgH		22	MgH	11	11
Dozer Blade		SH	11	--	MgH	11	11

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
AH Class	Torso	3	30 km	3000 km
Backup	Torso	2	1 km	300 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
"Hands"		5K	Melee	+0			
50cm Cannon	Pod	15K	127^2	+1	15	-	Linked, Long Range
Ammo					4	7	AP
50cm Cannon	Pod	15K	127^2	+1	15	-	Linked, Long Range
Ammo					4	7	AP
50cm Cannon	Pod	15K	127^2	+1	15	-	Linked, Long Range
Ammo					4	7	AP
50cm Cannon	Pod	15K	127^2	+1	15	-	Linked, Long Range
Ammo					4	7	AP

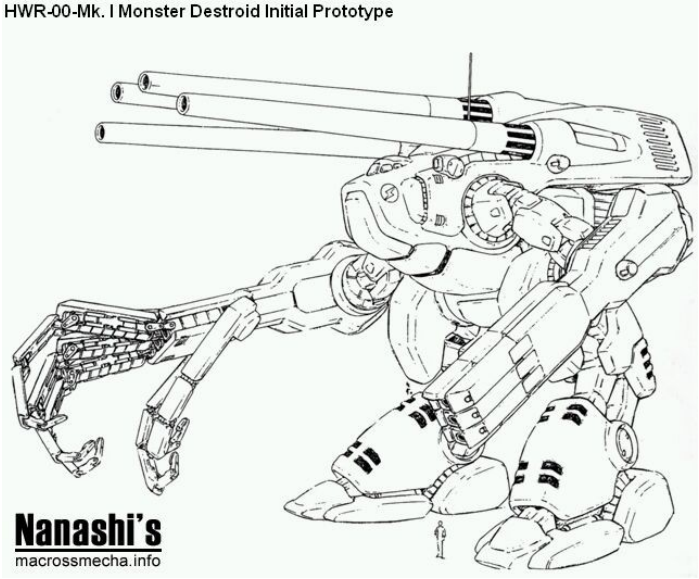
Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks, Extra Crew (+2), Semi-Monocoque

Multipliers
Environmentals (Arctic, Space, Desert, Underwater), Verniers (2 Main Body, 9 each Leg)
Superheavy Hydraulics, Weight Inefficient

Notes: This was the first model of the Monster, with only one built in this model (later upgraded to Mk IP). The arms lack the missile launchers and have extendable "fingers" that grip into specially designed sections on the deck of the Asuka II carrier to anchor the mecha down to fire reaction warheads from the 50cm cannons.

HWR-00-Mk IP Monster

COST: 1714 CP (+73.5 CP for railgun ammo; +299.6 CP for 28x standard shell)
Availability: 2008



HEIGHT:
22.46m to guns' muzzles
WIDTH:
24m
LENGTH:
41m
WEIGHT:
252,500 kg

Mode	MV	Land MA	Fly MA
Destroid	-6	2 (100m/round)	0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MgH	22	22	MgH	11	11
Right Arm		SH	11	11	MgH	11	11
Left Arm		SH	11	11	MgH	11	11
Right Leg		MgH	12	12	MgH	11	11
Left Leg		MgH	12	12	MgH	11	11
Pod		MgH		22	MgH	11	11

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
AH Class	Torso	3	30 km	3000 km
Backup	Torso	2	1 km	300 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Arm Swat		5K	Melee	+0			
50cm Cannon	Pod	15K	127^2	+1	15	-	Linked, Long Range
Ammo					4	7	AP
50cm Cannon	Pod	15K	127^2	+1	15	-	Linked, Long Range
Ammo					4	7	AP
50cm Cannon	Pod	15K	127^2	+1	15	-	Linked, Long Range
Ammo					4	7	AP

50cm Cannon	Pod	15K	127^2	+1	15	-	Linked, Long Range
Ammo					4	7	AP
Tri Railgun	Right Arm	3K	24	+1	3	-	BV6, Linked
Ammo	Right Arm				5	100	AP
Tri Railgun	Left Arm	3K	24	+1	3	-	BV6, Linked
Ammo	Left Arm				5	100	AP

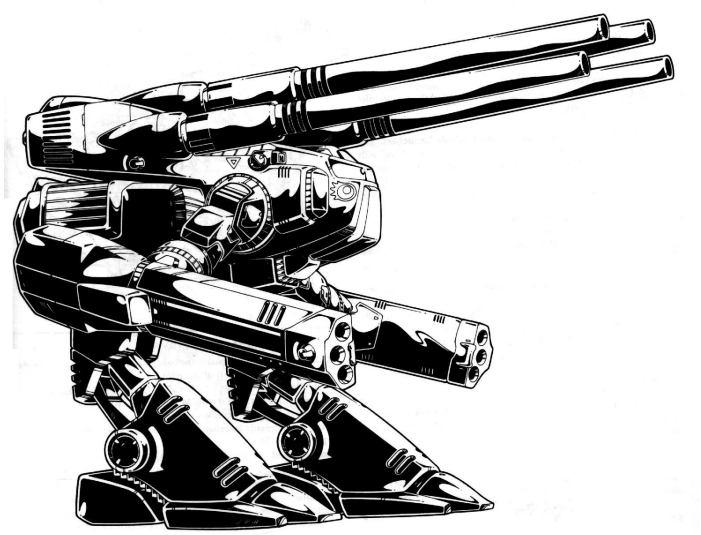
Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks, Extra Crew (+2)

Multipliers
Environmentals (Arctic, Space, Desert, Underwater), Verniers (2 Main Body, 9 each Leg)
Superheavy Hydraulics, Weight Inefficient

Notes: This was the first Monster Mk I upgraded to include triple-barrel railguns in the arms. It would later be upgraded to a Mk II unit.

HWR-00-Mk II Monster

COST: 1305 CP (+299.6 CP for 28x standard shell, +367.2 for 12x LRM)
Availability: 2008 to 2010
Manufacturer: Viggers/Centinental



HEIGHT:
22.46m to guns' muzzles
WIDTH:
24m
LENGTH:
41m
WEIGHT:
285,500 kg

Mode	MV	Land MA	Fly MA
Destroid	-6	2 (100m/round)	0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MgH	22	28	MgH	11	11
Right Arm		SH	11	14	MgH	11	11
Left Arm		SH	11	14	MgH	11	11
Right Leg		MgH	12	15	MgH	11	11
Left Leg		MgH	12	15	MgH	11	11
Dozer Blade		SH	11	--	MgH	11	11

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
AH Class	Torso	3	30 km	3000 km
Backup	Torso	2	1 km	300 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Arm Swat		5K	Melee	+0			
Tri-Missile	Right Arm	12K	127^2	+2	5	-	Volleys of 1-3, Linked
Ammo					2	6	Blast 2, Long Range
Tri-Missile	Left Arm	12K	127^2	+2	5	-	Volleys of 1-3, Linked
Ammo					2	6	Blast 2, Long Range
40cm Cannon	Pod	15K	127^2	+1	15	-	Linked, Long Range
Ammo					4	7	AP
40cm Cannon	Pod	15K	127^2	+1	15	-	Linked, Long Range
Ammo					4	7	AP
40cm Cannon	Pod	15K	127^2	+1	15	-	Linked, Long Range
Ammo					4	7	AP
40cm Cannon	Pod	15K	127^2	+1	15	-	Linked, Long Range
Ammo					4	7	AP

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks, Extra Crew (+2)

Multipliers
Environmentals (Arctic, Space, Desert, Underwater), Verniers (2 Main Body, 9 each Leg)
Superheavy Hydraulics, Weight Inefficient (triple), Semi-Monocoque

Notes: When the SDF-1 launched from earth, they only had two of these, with parts onboard the Daedelus for 3 or 4 other units. One was destroyed during Project Supernova in 2040, and one was onboard City 7.

HWR-00-Mk II-G Monster

COST: 3571.9 CP
Availability: 2014 [?]
Manufacturer: Viggers/Centinental

HEIGHT:
22.46m to guns' muzzles
WIDTH:
24m
LENGTH:
41m
WEIGHT:
273,500 kg

Mode	MV	Land MA	Fly MA
Destroid	-6	2 (100m/round)	0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MgH	22	28	MgH	11	11
Right Arm		SH	11	14	MgH	11	11
Left Arm		SH	11	14	MgH	11	11
Right Leg		MgH	12	15	MgH	11	11
Left Leg		MgH	12	15	MgH	11	11
Dozer Blade		SH	11	--	MgH	11	11

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
AH Class	Torso	3	30 km	3000 km
Backup	Torso	2	1 km	300 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Arm Swat		5K	Melee	+0			
Tri-Missile	Right Arm	4K	12,800	+1	5	-	Volleys of 1-3, Linked
Ammo					2	6	Blast 3, Long Range
Tri-Missile	Left Arm	4K	12,800	+1	5	-	Volleys of 1-3, Linked
Ammo					2	6	Blast 3, Long Range
Particle Cannon	Torso	15K	127^2	+1	15	U	Warmup 1, Long Range, Link
Particle Cannon	Torso	15K	127^2	+1	15	U	Warmup 1, Long Range, Link
Particle Cannon	Torso	15K	127^2	+1	15	U	Warmup 1, Long Range, Link

Particle Cannon	Torso	15K	127^2	+1	15	U	Warmup 1, Long Range, Link

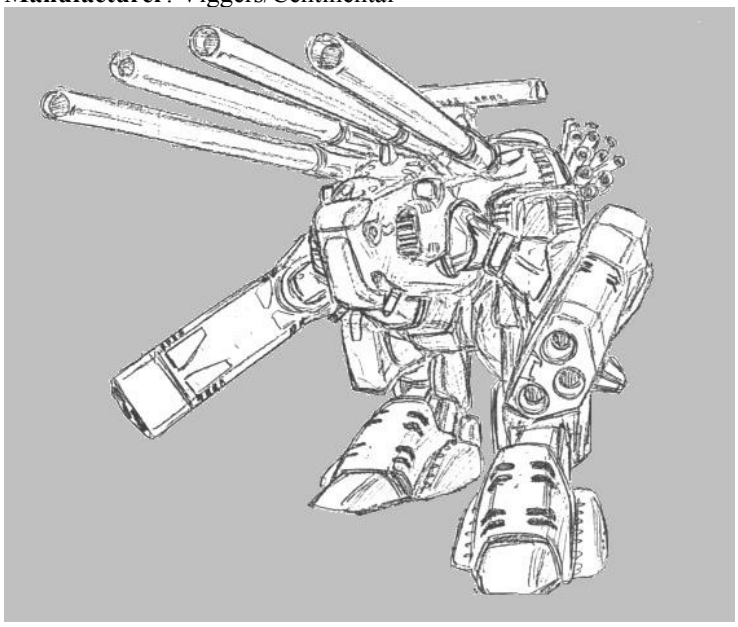
Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks, Extra Crew (+2), Semi-Monocoque

Multipliers
Environmentals (Arctic, Space, Desert, Underwater), Verniers (2 Main Body, 9 each Leg)
Superheavy Hydraulics, Weight Inefficient

Notes: Upgrade of the Mk II that replaces the limited ammunition 40cm cannons with heavy particle beam guns.

HWR-00-Mk III Monster-X

COST: 4101.15 CP
Availability: 2014 to 20XX
Manufacturer: Viggers/Centinental



HEIGHT:
22.46m to guns' muzzles
WIDTH:
24m
LENGTH:
41m
WEIGHT:
285,500 kg

Mode	MV	Land MA	Fly MA
Destroid		-6	2 (100m/round) 0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MgH	22	28	MgH	11	11
Right Arm		SH	11	14	MgH	11	11

Left Arm	SH	11	14	MgH	11	11
Right Leg	MgH	12	15	MgH	11	11
Left Leg	MgH	12	15	MgH	11	11
Dozer Blade	SH	11	--	MgH	11	11

Thrusters	**Location**	**MA**
None		

Sensors	**Location**	**Kills**	**Sensors**	**Communications**
SH Class (Exc.)	Torso	3	400 km	50,000 km
Backup	Torso	2	1 km	300 km

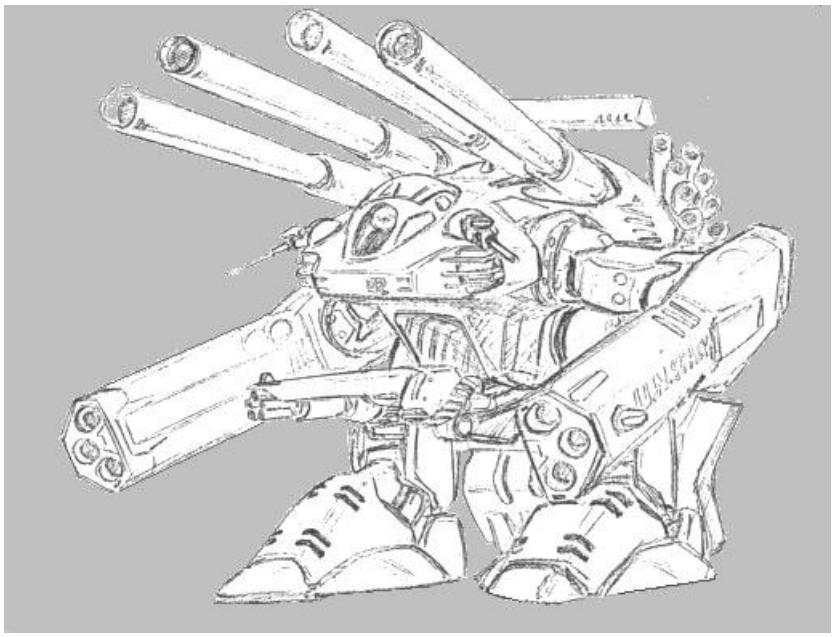
Weapon	**Location**	**DMG**	**Range**	**WA**	**Kills**	**Shots**	**Notes**
Arm Swat		5K	Melee	+0			
LSSN-20	Right Arm	4K	12,800	+1	5	-	Volleys of 1-3, Linked
Ammo					2	6	Blast 3, Long Range
LSSN-20	Left Arm	4K	12,800	+1	5	-	Volleys of 1-3, Linked
Ammo					2	6	Blast 3, Long Range
40cm Cannon	Pod	15K	16,080	+1	15	-	Linked
Ammo					4	8	AP, Long Range
40cm Cannon	Pod	15K	16,080	+1	15	-	Linked
Ammo					4	8	AP, Long Range
40cm Cannon	Pod	15K	16,080	+1	15	-	Linked
Ammo					4	8	AP, Long Range
40cm Cannon	Pod	15K	16,080	+1	15	-	Linked
Ammo					4	8	AP, Long Range
50mm Autogun	Torso	1K	24	+1	1	-	BV3, Linked, All-Purpose
Ammo						20	
50mm Autogun	Torso	1K	24	+1	1	-	BV3, Linked, All-Purpose
Ammo						20	

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks, Extra Crew (+2), Semi-Monocoque

Multipliers
Environmentals (Arctic, Space, Desert, Underwater), Verniers (2 Main Body, 9 each Leg)
Superheavy Hydraulics, Weight Inefficient

HWR-00-Mk IV Big Monster

COST: 4154.35 CP
Availability: 2024 to 20XX
Manufacturer: Viggers/Centinental



HEIGHT:
22.46m to guns' muzzles
WIDTH:
24m
LENGTH:
41m
WEIGHT:
285,500 kg

Mode	MV	Land MA	Fly MA
Destroid	-6	2 (100m/round)	0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MgH	22	28	MgH	11	11
Right Arm		SH	11	14	MgH	11	11
Left Arm		SH	11	14	MgH	11	11
Right Leg		MgH	12	15	MgH	11	11
Left Leg		MgH	12	15	MgH	11	11
Dozer Blade		SH	11	--	MgH	11	11

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
SH Class (Exc.)	Torso	3	400 km	50,000 km
Backup	Torso	2	1 km	300 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Arm Swat		5K	Melee	+0			
Tri-Missile	Right Arm	4K	12,800	+1	5	-	Volleys of 1-3, Linked
Ammo					2	6	Blast 3, Long Range
Tri-Missile	Left Arm	4K	12,800	+1	5	-	Volleys of 1-3, Linked

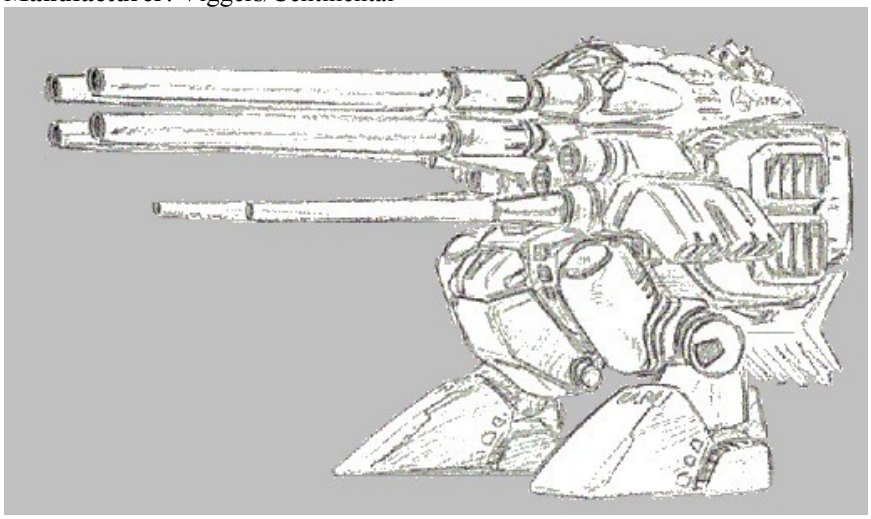
Ammo					2	6	Blast 3, Long Range
40cm Cannon	Pod	15K	16,080	+1	15	-	Linked
Ammo					4	10	AP, Long Range
40cm Cannon	Pod	15K	16,080	+1	15	-	Linked
Ammo					4	10	AP, Long Range
40cm Cannon	Pod	15K	16,080	+1	15	-	Linked
Ammo					4	10	AP, Long Range
40cm Cannon	Pod	15K	16,080	+1	15	-	Linked
Ammo					4	10	AP, Long Range
Mauler ROV-20	Torso	1K	12	+1	1	U	Linked, Phalanx Variable
Mauler ROV-20	Torso	1K	12	+1	1	U	Linked, Phalanx Variable
50mm Autogun	Torso	1K	24	+1	1	-	BV4, All-Purpose
Ammo						20	

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks, Extra Crew (+3), Semi-Monocoque

Multipliers
Environmentals (Arctic, Space, Desert, Underwater), Verniers (2 Main Body, 9 each Leg)
Superheavy Hydraulics, Weight Inefficient

HWR-01-Mk I Monster Turret

COST: 3297.45 CP
Availability: 2023 to 20XX
Manufacturer: Viggers/Centinental



HEIGHT:
22.46m to guns' muzzles
WIDTH:
24m
LENGTH:
41m
WEIGHT:
285,500 kg

Mode	MV	Land MA	Fly MA
Destroid	-6	2 (100m/round)	0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MgH	22	28	MgH	11	11
Right Leg		MgH	12	15	MgH	11	11
Left Leg		MgH	12	15	MgH	11	11
Pod		MgH			MgH	11	11
Dozer Blade		SH	11	--	MgH	11	11

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
SH Class (Exc.)	Torso	3	400 km	50,000 km
Backup	Torso	2	1 km	300 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
40cm Cannon	Pod	15K	127^2	+1	15	-	Linked
Ammo					4	9	AP, Long Range
40cm Cannon	Pod	15K	127^2	+1	15	-	Linked
Ammo					4	9	AP, Long Range
40cm Cannon	Pod	15K	127^2	+1	15	-	Linked
Ammo					4	9	AP, Long Range
40cm Cannon	Pod	15K	127^2	+1	15	-	Linked
Ammo					4	9	AP, Long Range
20cm Cannon	Torso	7K	1,200	+1	7	-	Linked
Ammo						10	AP, Long Range
20cm Cannon	Torso	7K	1,200	+1	7	-	Linked
Ammo						10	AP, Long Range
PBG-11 Gun	Torso	10K	60	+1	10	U	Warmup 1, Linked
PBG-11 Gun	Torso	10K	60	+1	10	U	Warmup 1, Linked
PBG-11 Gun	Torso	10K	60	+1	10	U	Warmup 1, Linked
PBG-11 Gun	Torso	10K	60	+1	10	U	Warmup 1, Linked

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks, Extra Crew (+3), Semi-Monocoque

Multipliers
Environmentals (Arctic, Space, Desert, Underwater), Verniers (2 Main Body, 9 each Leg)
Superheavy Hydraulics, Weight Inefficient

HWR-X Star Slam

COST: 565.25 CP
Availability: ??
Manufacturer: Viggers/Centinental

HEIGHT:
22.46m to top of rail
WIDTH:
24m
LENGTH:
41m
WEIGHT:
285,500 kg

Mode	MV	Land MA	Fly MA
Destroid	-6	2 (100m/round)	0

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MgH	22	28	MgH	11	11
Right Arm		SH	11	14	MgH	11	11
Left Arm		SH	11	14	MgH	11	11
Right Leg		MgH	12	15	MgH	11	11
Left Leg		MgH	12	15	MgH	11	11
Missile Rail		MgH	11	14	MgH	11	11
Dozer Blade		SH	11	--	MgH	11	11

Thrusters	Location	MA
None		

Sensors	Location	Kills	Sensors	Communications
AH Class	Torso	3	30 km	3000 km
Backup	Torso	2	1 km	300 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Arm Swat		7K	Melee	+0			

IRM Rack	Right Arm	7K	1200	+1	9	20	
PBG-11E Gun	Left Arm	10K	90	+1	10	U	Warmup 1. Linked
PBG-11E Gun	Left Arm	10K	90	+1	10	U	Warmup 1, Linked
ICBM Rail	Torso	700K	**	+1	25	1	Warmup 2, Blast 15

** 6,437,376 hexes (321,868.8 km)

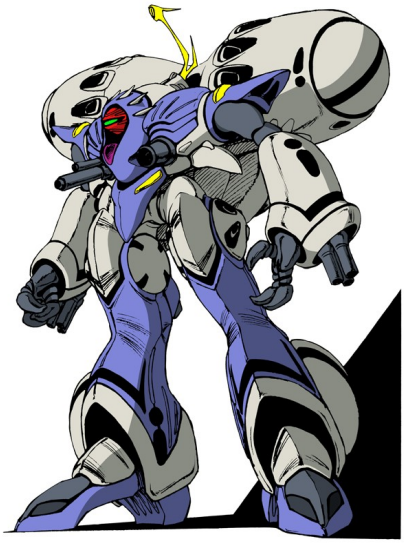
Shield
MS Class, Alpha armor (DC 2), DA +0, SP 8, Right Arm mounted

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod
Self Destruct, Combat Computer, Magnetic Foot Locks, Extra Crew (+2), Semi-Monocoque

Multipliers
Environmentals (Arctic, Space, Desert, Underwater), Verniers (2 Main Body, 9 each Leg)
Superheavy Hydraulics, Weight Inefficient

Notes: Has an uplink to the Eye of God orbital defense network. The ICBM rail can fire a Strike missile (see capital ship weapons); the cost of the missile is **not** included and is separate from the mecha.

Queadlunn-Quilqua



COST: 947 CP (+298.2 CP for missiles)
Availability: 2035+
Manufacturer: General Galaxy

HEIGHT:
16.75m
WIDTH:
18.4
LENGTH:
10.8m
WEIGHT:
32,500 kg

Mode	MV	Land MA	Fly MA
Power Armor	+2	7 (350m/round)	74 (3700m/round)

Maneuver Pool +200%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	10	HS/A	5	5
Right Arm		MS	5	5	HS/A	5	5
Left Arm		MS	5	5	HS/A	5	5
Right Leg		MS	5	5	HS/A	5	5
Left Leg		MS	5	5	HS/A	5	5
Right Pod		HS		10	HS/A	5	5
Left Pod		HS		10	HS/A	5	5

Thrusters	Location	MA
Thruster	Right Pod	37
Thruster	Left Pod	37

Sensors	Location	Kills	Sensors	Communications
LH	Torso	2	20 km	1800 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	2K	Melee	+0	1	U	Quick, Handy
Impact Cannon	Left Torso	3K	24	+1	3	U	Linked
Particle Beam	Right Torso	5K	32	+1	5	U	Mated
Laser	Right Torso	2K	12	+1	2	U	Mated, Phalanx Vari, BV3
Tri-barrel Laser	Right Arm	2K	12	+1	2	U	BV3, All Purpose, Linked
Tri-barrel Laser	Left Arm	2K	12	+1	2	U	BV3, All Purpose, Linked
Missile Rack	Right Pod	2K	32	+2	7	50	CMV, Crosslinked
Missile Rack	Right Leg	2K	32	+2	2	21	CMV, Crosslinked
Missile Rack	Left Pod	2K	32	+2	7	50	CMV, Crosslinked
Missile Rack	Left Leg	2K	32	+2	2	21	CMV, Crosslinked

Optional Systems
Nightsight, Spotlight, Combat Computer, Self Destruct, Storage Module

Multipliers
Environmentals (Space), Verniers (5 each Pod, 2 each Leg, 1 Torso)
Reflex Controls, Supercharged Engines, ACE +100%

Notes: Upgraded version of the Queadlunn-Rau. Amounts produced and their deployment is unknown. It is known that this has 20% improved performance over the Rau model, and is said to be the strongest of the Queadlunn series. It carries "more" missiles than the Rau, but no quantity is listed.

* One source states 4x missile racks with 33 missiles each, but this does not match the information of increased payload on the back mounted racks.

Queadlunn-Rea

COST: 1005 CP (+264.4 CP for missiles)
Availability: 205X
Manufacturer: General Galaxy ?

HEIGHT:
16.75m
WIDTH:
18.4
LENGTH:
10.8m
WEIGHT:
32,500 kg

Mode	MV	Land MA	Fly MA
Power Armor	-2	7 (350m/round)	74 (3700m/round)

Maneuver Pool +200%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	HS/A	5	5
Right Arm		MS	5	6	HS/A	5	5
Left Arm		MS	5	6	HS/A	5	5
Right Leg		MS	5	6	HS/A	5	5
Left Leg		MS	5	6	HS/A	5	5
Right Pod		HS		10	HS/A	5	5
Left Pod		HS		10	HS/A	5	5

Thrusters	Location	MA
Thruster	Right Pod	37

Thruster	Left Pod	37					

Sensors	**Location**	**Kills**	**Sensors**	**Communications**
LH	Head	2	20 km	1800 km
Backup	Torso	2	1 km	100 km

Weapon	**Location**	**DMG**	**Range**	**WA**	**Kills**	**Shots**	**Notes**
Hands	Arms	2K	Melee	+0	1	U	Quick, Handy
Impact Cannon	Torso	3K	24	+1	2	U	Linked
Impact Cannon	Torso	3K	24	+1	2	U	Linked
Tri-barrel Laser	Right Arm	2K	12	+1	2	U	BV3, All Purpose, Linked
Tri-barrel Laser	Left Arm	2K	12	+1	2	U	BV3, All Purpose, Linked
Missile Rack	Right Pod	2K	32	+2	6	42	CMV, Crosslinked
Missile Rack	Left Pod	2K	32	+2	6	42	CMV, Crosslinked
Missile Rack	Right Leg	2K	32	+2	2	21	CMV, Crosslinked
Missile Rack	Left Leg	2K	32	+2	2	21	CMV, Crosslinked
PBG-11E	Left Pod	10K	75	+1	10	U	Warmup 1

Optional Systems
Nightsight, Spotlight, Combat Computer, Self Destruct, Storage Module, Weapon Mount (left pod)

Multipliers
Environmentals (Space), Verniers (5 each Pod, 2 each Leg, 1 Torso), Monocoque
Reflex Controls, Supercharged Engines, ACE +100%, Inertial Store Converter

Notes: The impact cannons always fire together unless one is destroyed.

Chapter 3 – UN Conventional Vehicles

This chapter covers conventional vehicles used by the UN and its allies. This includes all land, sea and air vehicles that do not qualify as mecha or capital ships. The majority of these vehicles are not equipped with the advanced weapons and armor as the mecha and capital ships are, although many of them can still use the advanced missiles used by mecha; unless specified, they cannot use Diamondback missiles or any HM or other advanced missiles.

Note: SDP is the structural equivalent of Hits (1 SDP = 1 Hit). Most weapons will have SP equal to half their Hits, rounded up.

Pre-OT Weapons

Most conventional vehicles mount weapons made before OTEC reverse-engineered compatible weapon systems. If a particular vehicle uses OT based weapons, it will be noted in their profile. CP costs are already scaled to the appropriate scale.

Flamethrower

+1 WA, 4d6 Hits, Clip 30, Incendiary, Wide Angle, Range 30m, 6.0 kg, 15 SDP, CP 5, 1/10 scale

5.56mm Light Machinegun (Howard AR-21 or H&K G36)

+1 WA, 5d6 Hits, Clip 30 or 100, BV 3, Anti-Personnel Variable, Range 450m, 4.0 kg, 25 SDP, CP 3.3, 1/10 scale

5.56mm Minigun

+1 WA, 5d6 Hits, Clip 1000, BV 6, Anti-Personnel Variable, Range 450m, 15 kg, 20 SDP, CP 6, 1/10 scale

7.62mm Light Machinegun (H&K G3)

+0 WA, 6d6+2 Hits, Clip 20 or 100, BV 3, Anti-Personnel Variable, Range 500m, 4.4 kg, 25 SDP, CP 2.2, 1/10 scale

7.62mm Minigun (M134)

+0 WA, 6d6+2 Hits, Clip 2000, BV 6, Anti-Personnel Variable, Range 500m, 30 kg, 25 SDP, CP 4, 1/10 scale

12.7mm Machinegun (.50 cal) (M2 “ma deuce”)

+1 WA, 6d10 Hits, Clip 100 (belt fed), BV 3, Anti-Personnel Variable, Range 2000m, 38 kg, 30 SDP, CP 16.2, 1/10 scale

16mm Gatling

+1 WA, 6d10 Hits, Clip 500, BV 6, Range 450m, 60 kg, 30 SDP, CP 5.5, 1/5 scale

20mm Gatling (M61A1 Vulcan)

+1 WA, 7d10 Hits, Clip 500, BV 6, Range 500m, 70 kg, 30 SDP, CP 6.4, 1/5 scale

25mm Autocannon

+0 WA, 7d10 Hits, Clip 40, BV 4, Range 500m, 40 kg, 30 SDP, CP 38, 1/5 scale

30mm Autocannon

Primary weapon on the A-10 Thunderbolt.

+0 WA, 8d10 Hits, Clip 50, BV 7, Range 600m, 45 kg, 30 SDP, CP 42, 1/5 scale

30mm Grenade Auto-Launcher

+0 WA, *, Clip 30, BV 3, Range 1300m, 11 kg, 25 SDP, CP 0.2, 1/5 scale
Fragmentation: 6d6 Hits 5m radius
HE: 3d10 Hits, AP
Flare: 1d6 Hits for 2 rounds, 20m illumination
Smoke: 10m radius
White Phosphorous: 4d6 Hits for 3 rounds, 10m radius

40mm Grenade Auto-Launcher

+0 WA, *, Clip 50, BV 5, Range 1600m, 25 kg, 30 SDP, CP 0.3, 1/5 scale
Fragmentation: 7d6 Hits 5m radius
HE: 4d10 Hits, AP
Flare: 1d6 Hits for 2 rounds, 20m illumination
Smoke: 10m radius
White Phosphorous: 4d6 Hits for 3 rounds, 10m radius

75mm Recoilless Cannon

+0 WA, 9d10 Hits, AP, 5m blast, Range 500m, 90 kg, 20 SDP, CP 48, 1/5 scale

120mm Smoothbore Cannon

Primary armament on the Abrams series MBT. Designed to fire depleted uranium APFSDS rounds, APFSDS tracker rounds, anti-personnel cartridges (1,150x 10mm tungsten balls) or rocket-propelled rounds.

+2 WA, Multi-feed, CP 621, 1/5 scale

M256 depleted uranium APFSDS: 12d10 Hits, AP, Incendiary, 2 km

M258 APFSDS-T: 12d10 Hits, AP, Tracer, 2km

M1028 anti-personnel cartridge: 8d10 Hits, Anti-personnel, Blast 10m, 500m

MRM-KE rocket propelled round: 11d10 Hits, AP, 12 km

Scorpion Missile

This is a missile used by many aircraft to hunt lightly-armored targets. It is infrared guided, and can be confused by chaff.

-1 WA, 7d10 Hits, Seek 2, Skill 12+, Range 2000m, 15 kg, 20 SDP, CP 1.2, 1/5 scale

AGM-56 Maverick

This is an infrared-guided air-to-surface missile used for destroying ground vehicles or light fortifications. This missile can be confused by releasing chaff.

+2 WA, 12d10 Hits, 4m blast, AP, Long Range, Range 27 km, 25 kg, SP 20, 20 SDP, CP 24, 1/5 scale

AIM-9 Sidewinder

This is a heat seeking air-to-air missile used for shooting down opposing aircraft. It can be confused by releasing flares.

+1 WA, 10d10 Hits, 2m blast, AP, Range 12 km, 20 kg, SP 20, 15 SDP, CP 1, 1/5 scale

Paveway Series Bombs

These are a series of laser-guided bombs with differing warhead payloads for different uses. Instead of free-falling, the laser designator causes the bomb to move its fins so that it drifts closer toward the target.

All models: +1 WA, 1/5 scale

GBU-10 – 909 kg warhead (6d10 Hits, Blast 50m), CP 2

GBU-12 – 227 kg warhead (4d10 Hits, Blast 25m), CP 1

GBU-16 – 454 kg warhead (5d10 Hits, Blast 25m), CP 1.5

GBU-24 – 909 kg warhead (6d10 Hits, Blast 75m), CP 2.5

GBU-27 – 909 kg warhead, penetrating (6d10 Hits, AP), CP 4

BLU-109 Bomb

The BLU series bomb bodies use PBNX-109 as explosive filler. The BLU-109A/B used with the GBU-24 and GBU-31(V)4/B is a special purpose bomb comprised of steel alloy used for hardened targets. The BLU-109/B (I-2000) is an improved 2,000-

pound-class bomb designed as a penetrator without a forward fuze well. Its configuration is relatively slim, and its skin is much harder than that of the standard MK-84 bomb. The skin is a single-piece, forged warhead casing of one-inch, high-grade steel. Its usual tail fuze is a mechanical-electrical FMU- 143. The 1,925-pound bomb has a 550-pound tritonal high-explosive blast warhead. The BLU-109/B was always mated with a laser guidance kit to form a laser-guided bomb in Desert Storm.

+1 WA, 4d10 Hits, AP, Blast 10m, CP 4

WCMD Bomb

The Wind Compensated Munitions Dispenser [WCMD "Wick-Mid"] is intended to remedy this current shortfall in Tactical Munition Dispenser munitions, such as the CBU-87 CEM [Combined Effects Munition], CBU-89 GATOR and CBU-97 SFW [Sensor Fuzed Weapon]. The weapon will use inertial guidance only (no GPS). The WCMD program develops a tail kit for these inventory dispenser weapons. These weapons will be capable of delivery from medium to high altitude delivery when equipped with a WCMD kit. The WCMD weapon will correct for wind effects and errors during the weapon's ballistic fall. The WCMD kit will turn these "dumb" bombs into accurate "smart" weapons. Currently, the dispenser is achieving an accuracy of within 30 feet. Both fighter and bomber aircraft will be able to employ WCMD from a wide range of altitudes, in adverse weather, using various tactics such as level, dive, and toss bombing, and bombing on coordinates.

+0 WA (+2 in wind), 6d10 Hits, Blast 25m, CP 5

LAU-68 Hydra

This is a multi-shot rocket pod, available in 70 and 127 mm variants. They are typically mounted on wing hardpoints.

70mm: -2 WA, 4d10 Hits, 2m blast, AP, Range 200m, 171 kg, SP 20, SDP 10, Payload 15, CP 7.2, 1/5 scale

127mm: -2 WA, 6d10 Hits, 4m blast, AP, Range 500m, 69 kg, SP 20, SDP 20, Payload 6, CP 2, 1/5 scale

Cluster Bombs

Cluster bombs are a group of munitions that typically have a parachute or streamer to slow their descent, then explode to release sub-munitions. They are treated as “normal” bombs for the purpose of payloads, but they have additional effects as listed below. All are 1/5 scale.

Anti-Personnel	-1 WA, 4d10 Hits, 10m blast, CP 0.5
Anti-Armor	-1 WA, 6d10 Hits, AP, 2m blast, CP 2.5
Anti-Runway	-1 WA, 9d10 Hits, AP, 20m blast, CP 4
Anti-Electrical	-1 WA, 2d10 Hits, electrical disruption, CP 5
Chemical Dispersal	-1 WA, by chemical, CP 3
Mine-Layer	-1 WA, Anti-personnel 4d6, 50m radius, CP 2

MOAB

MOAB (Massive Ordinance Air Blast, also affectionately called the “Mother Of All Bombs”), is a 9.1m long 9800 kg bomb, in which 8482 kg of that mass being high

explosives. It is considered to be the most powerful non-nuclear ordinance weapon created.

Due to the size and mass of the MOAB, it cannot be mounted on wing hardpoints, and is usually dropped out of a cargo bay.

-2 WA, 40d10 Hits, 200m blast, 9800 kg, SP 20, 40 SDP, CP 10

Fuel-Air Bomb

Thermobaric weapons distinguish themselves from conventional weapons by using atmospheric oxygen, instead of carrying an oxidizer in their explosives. They are also called high-impulse thermobaric weapons (HITs), fuel-air explosives (FAE or FAX), "heat and pressure" weapons, or vacuum bombs.

They produce more explosive energy from a smaller package than other explosives. Thermobaric weapons work by first expelling a cloud of explosive mist using a small charge, then igniting it with a second charge.

A thermobaric weapon consists of a container of a volatile liquid, in some designs including a finely powdered explosive component as a slurry, and (typically) two separate explosive charges. After the munition is dropped or fired, the first explosive charge (or some other dispersal mechanism) bursts open the container at a predetermined height and disperses the fuel in a cloud that mixes with atmospheric oxygen. Once the fuel is appropriately mixed, the second charge detonates, propagating an explosion (blast wave) through the cloud.

An accidental fuel-air explosion may occur as a result of a Boiling Liquid Expanding Vapor Explosion; for example when a tank containing liquified petroleum gas bursts. Silo explosions, caused by the ignition of finely-powdered atmospheric dust, are another example.

The blast wave destroys unreinforced buildings and equipment and kills and injures personnel. The antipersonnel effect of the blast wave is more severe in foxholes, on personnel with body armor, and in "stiff" enclosed spaces such as caves, buildings, and bunkers.

The overpressure within the detonation can reach 3 MPa (430 lbf/in^2) and the temperature can be 2500 to 3000 °C. Outside the cloud the blast wave travels at over 3 km/s. Following the initial blast is a phase in which the pressure drops below atmospheric pressure creating an airflow back to the center of the explosion strong enough to have a human bodily lifted and thrown. It draws in the unexploded burning fuel to create almost complete penetration of all non-airtight objects within the blast radius, which are then incinerated. Asphyxiation and internal damage can also occur to personnel outside the highest blast effect zone, e.g. in deeper tunnels, as a result of the blast wave, the heat, or the following air draw.

-1 WA, 60d10 Hits, 1 km blast, SP 25, 50 SDP, CP 40, 1/5 scale

*inflicts full damage to anyone not in fully enclosed armor/vehicles/buildings

Standard Naval Missile

Many cruisers and destroyers make use of “standard” missiles, which do not use any special systems, serving only to destroy the target. Produced by Raytheon.

SM-2 Block III IRM – 4.72m length, 708 kg, 167 km range

15d10 Hits, Long Range, CP

SM-2 Block IV LRM – 6.55m length, 1466 kg, 370 km range, 17d10 Hits

AGM-84 Harpoon

The AGM-84 Harpoon is an all-weather, over-the-horizon, anti-ship cruise missile system. Each missile is 4.6m long, 340mm in diameter, and 519 kg with a 221 kg penetration high explosive warhead, and has a range of 110 km. It is a standard weapon on the Arleigh Burke destroyer. It serves as a standoff land attack missile (SLAM).

+2 WA, 30d10 Hits, AP, Long Range, Range 110 km

Super Sea Sparrow

This is the next step up from the evolved sea sparrow missile. It serves as a naval vessel surface-to-air missile for close in defense. Each missile is 203mm in diameter, 3.6m long and 231 kg with a 40 kg blast/framgentation warhead. Range is 70 km.

+1 WA, 20d10 Hits, Blast 50m, Range 70 km

BGM-109 Tomahawk

The Tomahawk Land Attack Missile (TLAM) is a long-range, all-weather, subsonic cruise missile with stubby wings. Tomahawks are difficult to intercept, due to their small size, small radar cross-section and low-altitude flight. Each missile is 5.56m in length and 1440 kg with a range of 110 km.

+1 WA, 22d10 Hits, Long Range, Range 110 km

AIM-26 Falcon

The Falcon missile uses a sub-kiloton nuclear warhead. Each missile is 2.14m long, 29cm in diameter, 92.1 kg and has a range of 9.6 km at Mach 2.1. The W54 nuclear warhead has a variable yield of 10T to 250T. At 10T it can level a two city block area

+2 WA, Nuclear, Blast 8, Range 9.6 km, CP 38,372, 1/5 scale

20d10 Hits and Blast 50m at 10T; 30d10 Hits and Blast 100m at 50T; 40d10 Hits and Blast 150m at 100T, 50d10 Hits and Blast 250m at 150T; 60d10 Hits and Blast 300m at 200T; 70d10 hits and Blast 400m at 250T

ASROC Launcher

The ASROC (Anti Submarine ROCket) is a three-stage anti-submarine weapon (ASW) mounted on most destroyers and cruisers in the late 1990's to early 2000's. Each missile is 4.8m in length, 422mm in diameter and weighs 638 kg.

+1 WA, 35d10 Hits, Torpedo, Range 120 km

Phalanx CIWS

The Phalanx CIWS (close in weapon system) is a M61 20mm vulcan gatling gun with an auto-tracking unit designed as a last line of defense against anti-ship missiles. The vulcan has 1500 rounds of tungsten armor piercing rounds and can fire 3000 to 4500 rounds per minute. The whole unit weighs 6120 kg.

+2 WA, 7d10 Hits, Clip 300, BV 5, Range 500m, SP 20, 75 SDP, Anti-Missile

Aegis Combat System

The Aegis system was designed as a total weapon system, from detection to kill. The heart of the system is an advanced, automatic detect and track, multi-function

phased-array radar, the AN/SPY-1. This high powered (four megawatt) radar is able to perform search, track and missile guidance functions simultaneously with a track capacity of over 100 targets. The first Engineering Development Model (EDM-1) was installed in the test ship, *USS Norton Sound* (AVM 1) in 1973.

The computer-based command and decision element is the core of the Aegis combat system. This interface makes the Aegis combat system capable of simultaneous operation against a multi-mission threat: anti-air, anti-surface and anti-submarine warfare.

The Navy built the first Aegis cruisers using the hull and machinery designs of *Spruance* class destroyers. The commissioning of *USS Bunker Hill* (CG 52) opened a new era in surface warfare as the first Aegis ship outfitted with the Vertical Launching System (VLS), allowing greater missile selection, firepower and survivability. The improved AN/SPY-1B radar went to sea in *USS Princeton* (CG 59), ushering in another advance in Aegis capabilities. *USS Chosin* (CG 65) introduced the AN/UYK-43/44 computers, which provide increased processing capabilities.

In 1980, a smaller ship was designed using an improved sea-keeping hull form, reduced infra-red and radar cross section and upgrades to the Aegis Combat System. The first ship of the DDG 51 class, *Arleigh Burke*, was commissioned on the Fourth of July, 1991. The DDG 51 class was named after a living person, the legendary Adm. Arleigh Burke, the most famous destroyerman of World War II.

DDG 51s were constructed in flights, allowing technological advances during construction. Flight II, introduced in FY 1992, incorporates improvements to the SPY radar and the Standard missile, active electronic countermeasures and communications. Flight IIA, introduced in fiscal year 1994, added a helicopter hangar with one anti-submarine helicopter and one armed attack helicopter. The Aegis program has also projected reducing the cost of each Flight IIA ship by at least $30 million USD.

Miscellaneous Systems

These systems are pre-OT.

AGAMS

Active Gatling Anti-Missile System. This system will detect incoming missiles on a 1-9 on 1d10. Roll 1d10 for each incoming missile, with a cumulative -1 per missile after the first on the same round; on a 4+ the missile is shot down, on a 1-3 the missile blows up close to the vehicle and inflicts half damage. On a modified 0, that missile gets past and does normal damage.

Composite Armor

Layered high-tech armor that is designed to counter HEAP and HEAT ammunition. Against non-OT ammunition, this armor removes the AP tag.

ECM

This will jam enemy radar and radio on a 1-6 on 1d10 and add +15 to the difficulty for missiles to hit. Pre-OT ECM only jams OT radar/radio on a 1-2 on 1d10 and only adds +5 to the difficulty of missile lock.

ECCM

Negates ECM on a 1-5 on 1d10. Pre-OT ECCM only affects OT ECM on a 1 on 1d10.

Flare/Chaff

These impose a +10 to the difficulty of missile lock; flare against heat-seeking and chaff against radar-seeking. These are simpler than the OT countermissile measures and do not work against OT missiles.

IR Baffling

Adds +5/+10 to the difficulty of thermal or IR guided weapons, respectively.

Painting Laser & Paint Missiles

The laser designator grants a "paint" missile an additional +3 WA if the target is successfully "hit" by a painting laser.

Smoke Launchers

Smoke dispensers grant a +15 difficulty to visual-tracking weapons.

Stealthy

Passive stealth imposes a +15 difficulty to non-OT radar tracking.

UN Air Force: AV-15 Avenger II, F-24G Dragon II Fighter, ES-11A Cat's Eye Recon, VC-33 Mom's Kitchen, F-14A+2 Tomcat, Comanchero, Sea Sergeant, SB-10 Star Wing, VC-27 Tunny, S-3 Viking, SH-60 Seahawk, FL-200 Mistral, A-10 Thunderbolt, F-117A Nighthawk
UN Space Air Force: SF-3A Space Lancer, SC-27 Star Goose Shuttle, RC-4E Rabbit, SB-10 Starwing
UN Ground Force: M1AX Abrams MBT, MBT-97 Fubirai, Deuce-and-a-Half, APC
Unmanned Fighters: AIF-6 Ghost, AIF-7S Ghost, QF-2001 Ghost, QF-2200 Ghost, QF-3000E Ghost, QF-4000 Ghost
UN Navy Vessels: Arleigh Burke Class Destroyer, Kitty Hawk Class Carrier

Fixed-Wing Aircraft & Spacecraft

A-10 Thunderbolt

This is a rugged aircraft that proved itself in its role of tank-hunter. It possesses better armor than most interceptor type aircraft, and can still fly with one engine disabled. It can carry a maximum of 7,200 kg of ordinance spread amongst seven hardpoints. Some of their other equipment includes an inertial navigation system, electronic countermeasures, target penetration aids, self-protection systems, AGM-65 Maverick and AIM-9 Sidewinder missiles. Another important feature is the reinforced cockpit, shielded with 400 kg of titanium armor, granting it the nickname of "titanium bathtub".

Length: 16.62m
Wingspan: 17.53m
Height: 4.47m
Weight: 11,321 kg [22,680 kg maximum TO weight]
Speed: 706 kmph with 13,715m max ceiling (320 kmph minimum speed), 475 km fuel range
Crew: 1
SDP: 160
SP: 60 (+15 SP on cockpit hits from the sides or underside)
Weapons:

30mm GAU-8/A Avenger seven-barrel gatling gun with 1,350 rounds. The standard ammunition is a four-to-one mixture of high-explosive incendiary rounds and armor-piercing depleted-uranium rounds. [+0 WA, 8d10 Hits, Clip 50, BV 7, Range 600m, 30 SDP]

Four hardpoints on each wing

Three fuselage hardpoints

Manufacturer: Fairchild Republic Co.
Cost: 3,700,000 credits

AV-15 Avenger II

This is a VTOL jet fighter used by the UN for ship-borne attacks. The fighter has no integrated weapons, but can carry a fairly impressive payload of ordinance.

Length: 18.3m
Weight: 5,500 kg

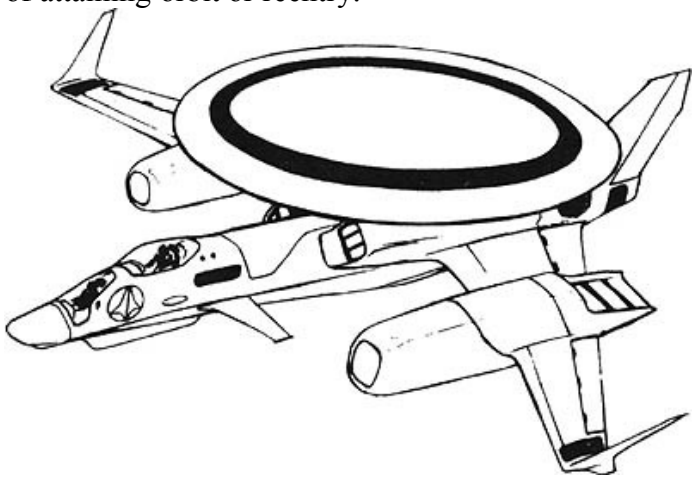
Speed: 1162 kmph with 30m to 16,765m min/max ceiling, 2896.2 km fuel range
Crew: 2
SDP: 110
SP: 30
Weapons: None
Four hardpoints on each wing (five bombs or SRM per rack)
One hardpoint on either side of the fuselage (one IRM per hardpoint)
Internal bomb bay (20 bomb capacity)
Manufacturer: LVT

EC-33 AWACS

This is a large recon plane.
Length: 46.6m
Weight: 100,000 kg
Speed: 997.5 kmph with 12.92 km maximum ceiling, 4220.5 km fuel range
Crew: three, plus up to 72 passengers and staff
SDP: 250
SP: 20

ES-11A Cat's Eye Recon

The Cat's Eye is a four-crew reconnaissance aircraft with advanced sensor radome on the top of the fuselage. It is capable of flight in an atmosphere and in space, but is not capable of attaining orbit or reentry.



Length: 19.8m
Weight: 10,400 kg
Speed: 601.76 kmph, 3057.1 km fuel range
SDP: Fuselage 100, Wings 30 each, Tail 20, Radome 40
SP: 20
Weapons: None
Systems: Advanced Sensors, Radio/Radar Analyzer, Spotting Radar, Target Analyzer, Resolution Enhance 10x. Doubles the number of units the combat computer can track at once.
Manufacturer: Glamor

F-117A Nighthawk

This is a stealth bomber designed for surgical strikes.

Length: 20.3m
Wingspan: 13.3m
Height: 3.8m
Weight: 23,813.60 kg standard operation
Speed: approximately Mach 1
Crew: 1
SDP: 120
SP: 30
Weapons: 2 each of the following on twin rotary internal pallets: MK82 2000lb, GBU-10 Paveway II, GBU-12 Paveway II, GBU-27 Paveway III, BLU 109, WCMD, Mark 61
Manufacturer: Lockheed Aeronautical Systems.

F-14A+2 Tomcat

This is the standard air superiority fighter used by the US and UN military, upgraded with Overtechnology avionics. Maximum speed is Mach 2.3 at 12,200m, and has a cruising range of 3,213 km. The hardpoints can mount traditional missiles or Overtechnology designed ones.

Length: 19.1m
Width: 11.65m swept wings, 19.54m un-swept wings
Height: 4.55m
Weight: 18,951 kg

SDP: 115
SP: 15
Crew: 2, pilot and RIO
Weapons:
20mm M61A1 Vulcan 6-barrel cannon with 675 rounds (+1 WA, 7d10 Hits, Clip 113, BV 6, Range 500m, 30 SDP)
Four hardpoints on the fuselage (one IRM per hardpoint)
Two hardpoints on each wing (one IRM per hardpoint)
Manufacturer: Grumman Aerospace

F-24G Dragon II Fighter

Designing begins in 2001 August. Uses material developed by OTEC from data from the Macross. Formally adopted as main fighter of the United Nations Forces in 2003. Primary function is that of fast interceptor.

Length: 17.3m
Weight: 18,800 kg
Speed: Mach 2.8 with 15.24 km ceiling, 1287 km fuel range
SDP: 95
SP: 20
Crew: 1
Weapons:
16mm gatling cannons (+1 WA, 6d10 Hits, Clip 30, BV 6, Range 450m, 60 kg, 30 SDP)
Three hardpoints on each wing (one IRM per hardpoint)
Manufacturer: McNell Douglar
Cost: 4,600,000 credits

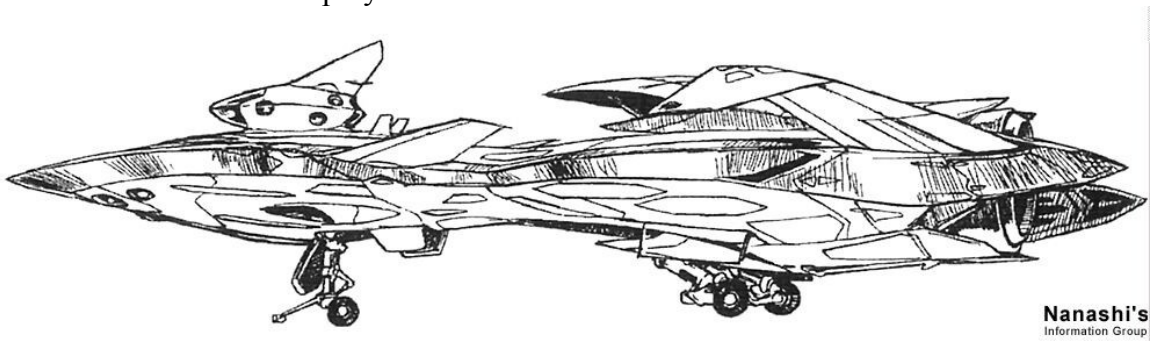
FL-200 Mistral

This is a rapid-response interceptor and tactical observer craft used during the United Nations War. After the war it was used as a chase-plane for the VF-X project. It is lightly armed.

Length: 12m ?
Weight:
Speed: Mach 1 ?
SDP: 75 fuselage, 15 per wing
SP: 20

QF-2001

Predecessor to the QF-3000E Ghost and Ghost X-9. Entered production before the United Nations Wars. Deployed aboard CVN-99 Asuka II.



Length: 18.69m ?
Weight: 14,000kg ?
Speed: Mach 1 ?
Weapons: ?

QF-2200A

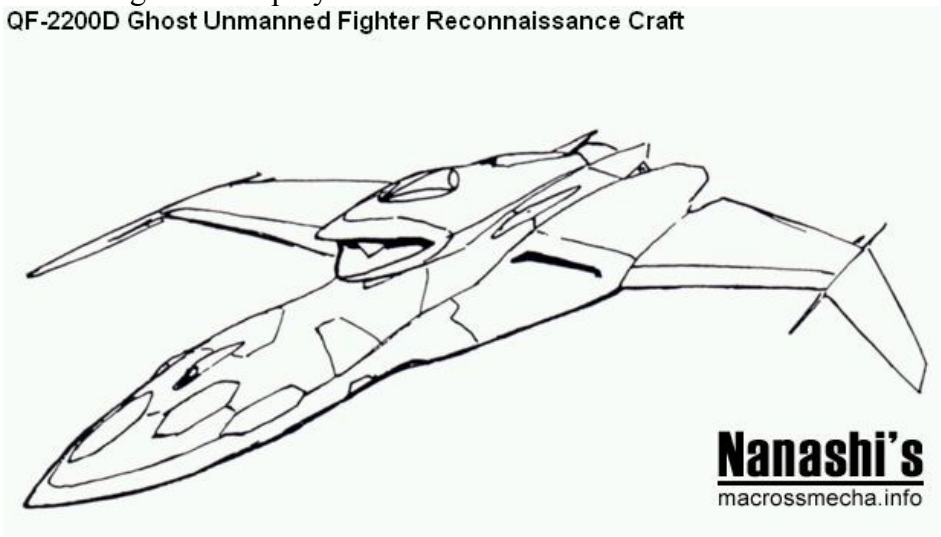
Drone variant equipped with a high-thrust turbofan jet unsuitable for such a small lightweight craft and modified for use as a booster for VF-0's special attack/assault specification. At first, the CVN-99 Asuka II's maintenance crewmembers intended to only use its engine, but since there was no time, they converted almost the entire vehicle as a booster.

The booster itself is the QF-2200D, but without the AI, reconnaissance package or unnecessary avionics. Added in place are five micromissile launchers and a minor AI to correct for the interaction of the drone and VF-0's wings.
Length: 12m ?
Weight: 5600 kg ?

Speed: ?
Weapons:
Five micromissile launchers (+1 WA, 3K, Range 32, Payload 3 each, 1K, CMV)

QF-2200D

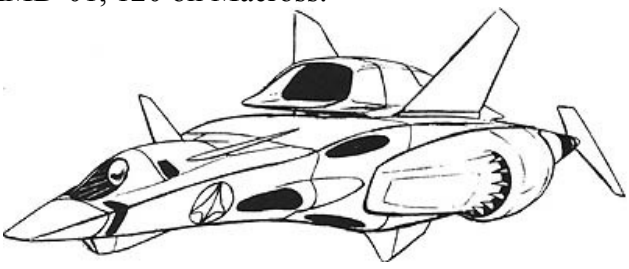
The QF-2200D is a small, lightweight, high-maneuverability stealth unmanned reconnaissance fighter whose mass production began in 2002. After exhausting skilled pilots in the chaos of the early stages of the U.N. Wars, the U.N. Forces released this to the frontlines in large quantities. Since it was designed and produced with existing technologies and minimal Overtechnology, it was suitable for mass production without high manufacturing costs. Deployed aboard CVN-99 Asuka II.



Length: ?
Weight: ?
Speed: ?
G-Force Tolerance: 25 G
Weapons: none
Systems: advanced sensors, passive stealth, AI

QF-3000E

The name "Ghost" passed on to the QF-3000E, a later extension of the Superbird series hypersonic lifting-body unmanned fighter bomber and thus much larger than the QF-2200 Ghost series. Deployed on ARMD class space carriers and on SDF-1 Macross; 270 deployed on ARMD-01, 120 on Macross.



Length: 16m
Weight: 8,300 kg

Speed: Mach 2.2 and Mach 5 with overboosters, 6,437.8 km fuel range
Weapons: Six autocannons (1200m range, 190 bursts per cannon)
[8] Internal missile pallet (12 SRM or 6 IRM)

QF-4000 Ghost Fighter

Drone fighter used by N.U.N.S. in 2059. They are based on the X-9, although they have their advanced AI locked to prevent another Sharon Apple incident. This lock can be released in emergencies, unleashing their full terror.

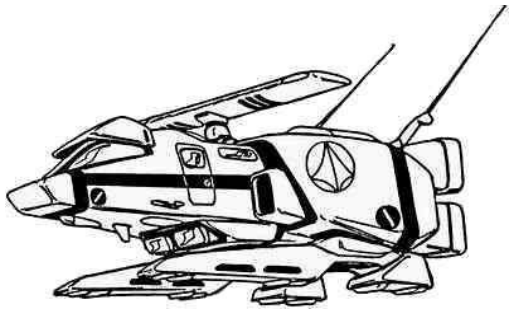
Length: ?
Weight: ?
Speed: ?
Kills: 8
SP: ?
Crew: --
Weapons:
Mauler ROV 25 Pulse Laser (x2):
Internal IRM Bay (x2): Payload 13, typically uses HMIRM
Additionals: dorsal hardpoint for fold generator, 4x ventral hardpoint for missile racks, countermissile dispenser (8x flare, 8x chaff, 4x squib), active stealth antennae, combat computer, NEC/L.A.I Corporation-manufactured model SA/A-2045 FCS2 self-learning AI
Manufacturer: ?
Variants: Differences are purely cosmetic.
AIF-7S (Frontier Fleet)
AIF-9B (13th New Macross class Fleet)
AIF-9V (Galaxy Fleet)
Super Parts Options: A QF-4000 is rarely deployed without a pair of dorsal packs. Both sets are designed for space or atmosphere use, and provide +10% thrust at negligible drag.
Standard: Micromissile Bay (x2): Payload 10, typically uses HMMM
Recon: Advanced Radar – Detect/Track up to 1000 targets. Has full electromagnetic and visual spectrum sensors. Range: 750km
QFS-05 Fold Wave Sensor – Detects fold faults and fold waves. Identify up to 1,024 targets, guide intermediate to long range missiles at 64 targets simultaneously, and control up to 6 ghost drones (3 is optimal). Range: ¼ lightyear (2,375,000,000,000 Km)

Electromagnetic Sensors – The sensor array can take detailed structural readings of an object and detect power sources, weapon ports, transmitters, and other valuable statistical data. Range: 75km (doubled on active scan, but gives opponents a +1 WA against the Elintseeker)

Communications Array – Intercept or transmit any communications (excluding laser). May instead blanket "white noise" to disrupt all communications (excluding laser). Range: 1,125km

RC-4E Rabbit

This is a space recon shuttle.



Length:
Weight:
Speed:
Crew: four
SDP: 80
SP: 20
Manufacturer:

S-3 Viking

The S-3 Viking performs a multi-role function as submarine hunter, fuel tanker, ECM and cargo transport.

Length: 16m
Wingspan: 20.6m
Height: 6.9m
Weight: 23,695.21 kg

Speed: 833.64 kmph
Crew: four; pilot, copilot/tactical, tactical coordinator, sensor operator
SDP: 175
SP: 20
Weapons: up to 1,795.32 kg of Harpoon Missiles, Maverick Missiles, Mines, Torpedoes, Rockets, Unguided Bombs, In-flight refueling 'buddy' system.
Manufacturer: Lockheed-California

SB-10 Starwing Space Bomber

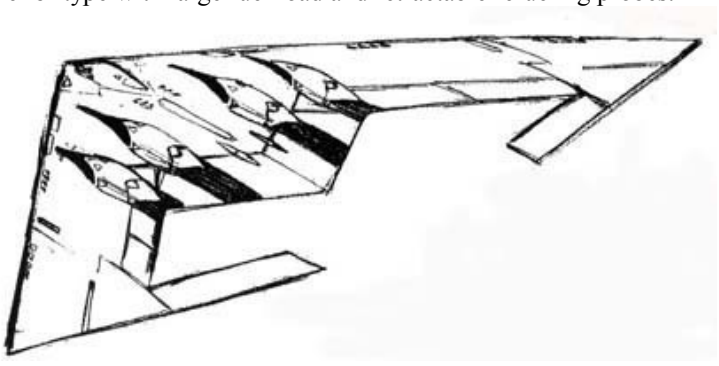
Designed to provide additional heavy support to UN Armed Forces units, the SB-10 Starwing was commissioned as the winner in a competition to provide a Heavy Bomber capable of trans-atmospheric flight, whilst carrying heavy payloads of missiles and bombs. As the SB-10 Starwing is not transformable it has a much higher payload rating as it does not require the extra space required for the machinery to allow it transform. If it could transform however it would be a truly terrifying craft as it is four to five times the size of the average variable fighter utilized by the UN Armed Forces.

One drawback noted during its production design phase was the immense size of the craft and the ease with which enemy craft and sensor operators would have in picking it up on their sensors. To correct this problem the SB-10 was coated in a passive stealth coating similar to that of the VF-17 Nightmare, making it invisible to sensors in perfect conditions, and at worst about the size of a small meteorite thus fooling many sensor operators into thinking it to be one if it maintained a similar approach.

Due to its mission parameters and size the SB-10 Starwing is almost completely defenseless and must be protected by escort variable fighters, to ensure its survival as it has no weapons other than those in its internally mounted bays, unless it is carrying drones on the four retractable hardpoints on its ventral surface. The drones are usually carried and deployed by the SB-10 at UN test centers to carrying the small lightweight drones to the combat area.

Models

SB-10a: limited to travel in space only. Capable of carrying RMS-1 or long-range type missiles only.
SB-10b: transatmospheric, fold-capable long-duration, long-distance space bomber.
SB-10c: upgraded with retractable hardpoints for carrying other vehicles or ordinance.
SB-10e: upgrade of the ‘c’ type for long-range reconnaissance gathering missions.
SB-10m: upgrade on the ‘c’ type for Marine troop transportation.
SB-10r: upgrade on the ‘b’ type with large fuel load and retractable refueling probes.

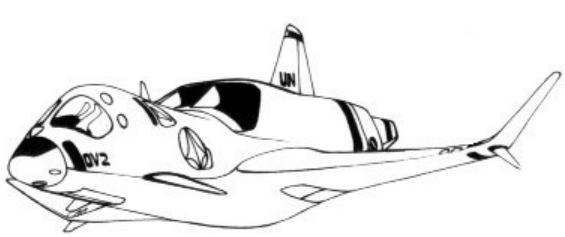


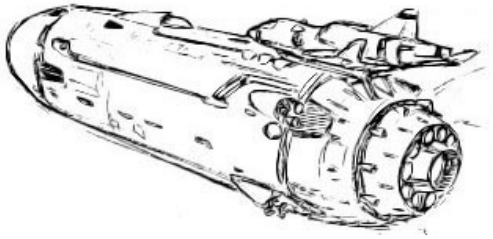
Length: 66m (central body)
Width: 97.5m wingspan
Height: 10m

Weight: 305,270 kg typical takeoff weight
Crew: 2 (pilot and copilot/navigator)
Kills: 250
Armor: SP 50, 50 Kills
Speed: Mach 0.97 (1040 kmph) max speed at 10,000 meters or less above sea level. Mach 1.7 (1820 kmph) max speed at 10,000-30,000 meters above sea level. Mach 5.15 (5221 kmph) max speed for 30 seconds maximum to allow the SB-10 to achieve orbital velocity over an Earth-class planet
Weapons: Internal Bomb Bay (carries 80,000 kg of ordinance)
Up to 38 LRM; can launch up to 10 per volley
Up to 84 HMIRM; can launch up to 10 per volley
Up to 84 IRM; can launch up to 18 per volley
Up to 192 SRM; can launch up to 30 per volley
Up to 192 conventional bombs; can drop up to 30 per volley
Systems: Passive Stealth, Combat Computer, Escape Pod, Self Destruct, Retractable Ventral Hardpoints (x4)
Manufacturer: Wingthrop

SC-27 Star Goose

This is a space shuttle capable of reentry into an earth-like atmosphere. The shuttle requires a massive booster to reach escape velocity.

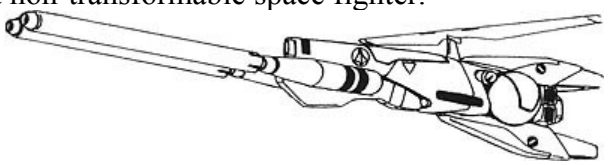




Length: 46.3m
Weight: 90,000 kg
Speed: Mach 2.2 (Mach 5 with booster)
Crew: two
SDP: 300
SP: 40
Radar: 321.6 km
Manufacturer: Stonewell

SF-3A Space Lancer

Designed as a non-transformable space fighter.



Length: 7.6m
Weight: 9,300 kg
Speed: Mach 2.2, 3218 km fuel range
Crew: one

SDP: 55
SP: 25
Weapons:
Two autocannons (16 km range, 120 bursts)
Two internal missile pallets (3 IRM each)
Manufacturer: Lockhee

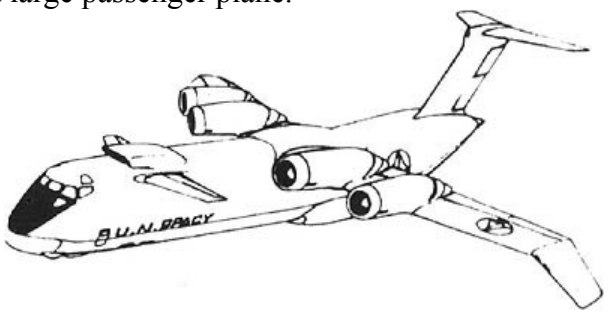
V-9 Ghost Attack Drone

Drone fighter used by the Macross Galaxy fleet. They possess most of the same abilities and AI as the X-9 ghost drone, and easily decimated the Macross Frontier fleet before the AIF-7S had their disablers turned off.

Length: ?
Weight: ?
Speed: ?
SDP: ?
SP: ?
Crew: --
Weapons:
?
Manufacturer: ?

VC-27 Tunny

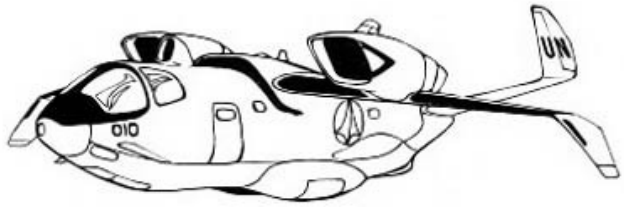
Designed as a large passenger plane.



Length: 54.86m
Weight: 150,000 kg
Speed: 844.68 kmph, 10,458.5 km fuel range
Crew: four, plus up to 300 passengers
SDP: 350
SP: 25
Manufacturer: General Titanic

VC-33 Mom's Kitchen

This is a cargo transport plane.



Length: 29.5m
Weight: 83,000 kg
Speed: Mach 1, 4220.5 km fuel range
Crew: four
SDP: 650
SP: 20
Manufacturer: Glamor

X-9 Ghost

This is the successor of the Superbird series circa 2039, tested secretly in parallel with Project Supernova. The drone fighter has increased AI and takes full advantage of newer technology (including hyper carbon alloy armor and structure).

During the 40th armistice ceremony, rogue AI Sharon Apple took control over prototype in order to kill Isamu Dyson and Guld Bowman. Despite the circumstances of the battle, all combat data was recorded and it was decided that this design would be put into production to assist manned fighters, but without the bio-neural chip.

Gyro/Helicopters

Comanchero Attack Helicopter

Heavy attack helicopter with minimal troop carrying capability.

Length: 17m
Weight: 3,780 kg
Speed: 482 kmph (804 kmph with boosters); 964 km fuel range
Crew: three, plus up to six passengers
MV: -2
SDP: 100
SP: 40
Weapons:

Triple-barrel M-89 12.7mm air-cooled machine gun [+1 WA, 6d10 Hits, Clip 100, BV 3, Range 2000m, 30 SDP]

Two side mounted 32mm autocannon [+0 WA, 8d10 Hits, Clip 50, BV 6, Range 600m, 30 SDP]

Wing missile pods (up to three per wing) (10 SRM each)

Systems: IR baffling, damage control, ejection seats, environmental control, flare/chaff launchers, military radio with scrambler, autopilot and navigator, ECM/ECCM, image enhancement, laser detector, military terrain-following radar, military radar detector linked to chaff launcher, telescopic sight and thermal sight, microwave detector

Manufacturer: Siokorvsky

Cost: 2,300,000 credits

Howard LH-2000

Lightweight helicopter typically used for civilian purposes and transport for military personnel in non-combat zones. It is also popular amongst wealthy civilians.

Length: 9m

Weight: 519 kg

Speed: 522 kmph maximum; 964 km fuel range

Crew: one, plus up to three passengers

SDP: 40

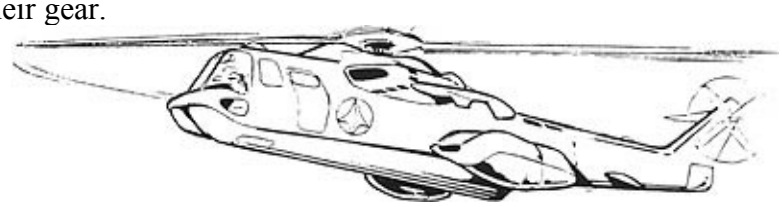
SP: 10

Manufacturer: Howard

Cost: 145,000 credits

Sea Sergeant

This helicopter serves mostly as a troop transport, capable of carrying a full platoon and their gear.



Length: 17m

Weight: 2205 kg

Speed: 482 kmph, 804 km fuel range

Crew: two, plus up to 24 troops

SDP: 200

SP: 40

Weapons:

Two M-89 12.7mm machine guns [+1 WA, 6d10 Hits, Clip 100, BV 3, Range 2000m, 30 SDP]

Four anti-sub air-to-water torpedoes (IRM)

Manufacturer: Siokorvsky
Cost: 2,450,000 credits

SH-60 Seahawk

[text]

Length: 19.76m with rotor turning
Width: 2.36m
Height: 5.18m with rotor turning
Weight: 6,054.55 kg dry; 9,182.52 kg max
Speed: 257.5 kmph
Crew: three; pilot, copilot/tactical, sensor operator
SDP: 350
SP: 35
Weapons:

Two air-to-water torpedoes
One Penguin missile

Manufacturer: Boeing/Sikorsky

Ground Vehicles

Standard Jeep

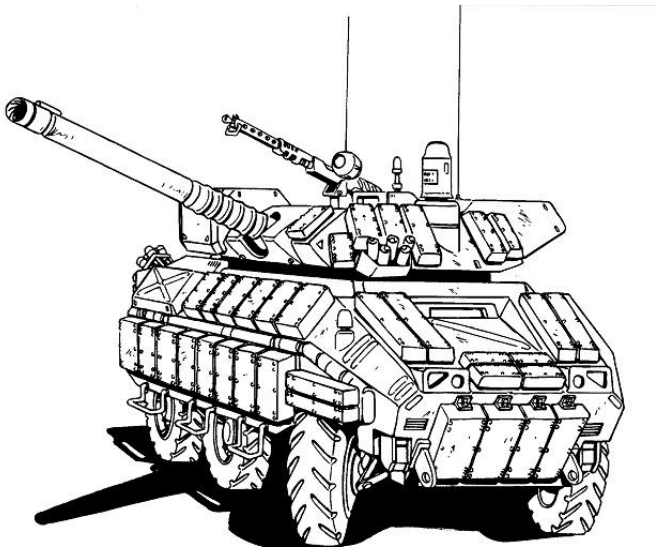
90 mph, Crew 1, SP 20, 650 kg cargo, 3 passengers, 2000 kg, 400 mile range, MV +0, pintle mount over the roll cage, off-road capability

Standard Motorcycle

110 mph, Crew 1, SP 5, 45 kg cargo or 1 passenger, 140 kg, 400 mile range, MV +1

APC

This armored vehicle is primarily used for moving infantry into position or for extracting them out of a sticky situation. It is well armored and very durable. It can also function as a light tank hunter. It also sees use as internal defense inside Macross colonial city-ships.



Length: ?
Width: ?
Height: ?
Weight: 2000 kg
Cargo: 6000 kg
Speed: 60 mph, 300 mile range
Crew: one; up to eight passengers
MV: -2
SDP: 200
SP: 80
Weapons:

75mm cannon [+0 WA, 9d10 Hits, AP, 5m blast, Range 500m, Clip 20, 20 SDP]

7.62 mm machinegun, coaxial with 75mm [+0 WA, 6d6+2 Hits, Clip 20, BV 3, Range 500m, 25 SDP]

12.7 mm machinegun [+1 WA, 6d10 Hits, Clip 30, BV 3, Range 2000m, 38 kg, 30 SDP]

Systems: off-road, reactive armor, fire extinguisher, 8 hours life support, four smoke launchers, military radio, radar rangefinder, autopilot, navigation system, light amplification, radar, radar detector, 2 extra clips for both machineguns
Manufacturer: ?
Cost: 1,100,000 credits

Beatrice

The Beatrice is a rapid deployment high firepower armored vehicle operated by the New U.N. Forces within the habitable city sections of colonization fleets such as Macross Frontier/25. The Beatrice appears to fill a role similar to the real life B1 Centauro but also features several enhanced capabilities. The Beatrice is sealed for operation in a vacuum utilizing an oxygen tank and purification system for life support. The small size of the Beatrice permits the vehicle to operate in more confined spaces where Destroids are not feasible. While possessing a powerful 105mm cannon the Beatrice is only lightly armored and thus relies upon firepower and mobility. The vehicle was quickly deployed against the Vajra attack upon the Macross Frontier fleet in 2059. Unfortunately the Vajra were far superior to these small mobile weapons and many Beatrice armored vehicles were easily destroyed by large Vajra units.
Length: ?
Width: ?
Height: ?
Weight: 17,000 kg
Cargo: ?
Speed: 80-100 kph
Crew: ?
MV: ?
SDP: ?
SP: ?
Weapons:
105mm cannon
Systems: off-road, reactive armor, fire extinguisher, 8 hours life support, four smoke launchers, military radio, radar rangefinder, autopilot, navigation system, light amplification, radar, radar detector, enviromentally sealed
Manufacturer: ?
Cost: ?

Deuce-and-a-Half

The deuce-and-a-half is a sturdy workhorse vehicle capable of hauling very heavy payloads. The truck gets its nickname from the fact it can haul 2 and a half tons. This particular truck serves well as both a troop carrier or to transport cargo or heavy weapons.

Length: ?
Width: ?
Height: ?
Weight: 5000 kg
Cargo: 2500 kg
Speed: 80 mph, 800 mile range
Crew: one; 1 passenger
MV: -4
SDP: 75
SP: 10
Weapons: none
Manufacturer: ?
Optional Systems: amphibious, off-road capable, radio, pintle mount
Cost: 60,000 credits

HMMWV "HumVee"

The M998 High Mobility Multipurpose Wheeled Vehicle (HMMWV or Hum-Vee) is a highly durable military motor vehicle. The humvee fulfills many roles such as mobile weapon carrier, communications relay, ambulance, small-group troop transport, logistics, artillery towing and tank hunter.

Length: 5.13m
Width: 2.16m
Height: 1.75 to 2.59m
Weight: 3500 kg
Speed: 88.5 kmph, 540 km range (100 mph, 400 miles)
Crew: two, with up to two passengers
MV: +0
SDP: 60
SP: 15
Weapons:
Systems: pintle mount over passenger seat (capable of many different mounts), off-road capability
Optional Systems: winch (2700 kg limit), deep-water fording kit (1.5m depth), supplemental armor kit (increase to SP 25), various optional systems can be mounted in the rear
Manufacturer: AM General
Cost: 30,000 credits

M1A2+ Abrams

Primary MBT of the United States and used in joint efforts with the UN before their replacement by destroid units.

Length: 9.8m
Width: 3.6m
Height: 2.4m
Weight: 68,540 kg
Speed: 67.59 kmph
Crew: four; loader, gunner, driver, commander
MV: +2
SDP: 360
SP: 225
Weapons:

120mm smoothbore cannon [+2 WA, Multi-feed]

M256 depleted uranium APFSDS: 12d10 Hits, AP, Incendiary, 2 km
M1028 anti-personnel cartridge: 8d10 Hits, Anti-personnel, 500m
MRM-KE rocket propelled round: 11d10 Hits, AP, 12 km

M2 12.7mm machinegun [+1 WA, 6d10 Hits, Clip 30, BV 3, Range 2000m, 30 SDP]

Two M240 7.62mm machineguns (1 pintle, 1 coaxial) [+0 WA, 6d6+2 Hits, Clip 20, BV 3, Range 500m, 25 SDP]

Systems: composite armor, amphibious mod, damage control, environmental control, 12 hours life support (4 hours for three), chaff launcher, IR smoke dispenser, AEAMS (40 charges), military radio with scrambler, laser communicator, satellite uplink, multi-targeter, microwave and visual rangefinders, autopilot and navigation system, ECM/ECCM, image enhancer, laser detector, microwave detector, military radar, military radar detector, telescopic sight and thermal sight, 2 extra clips for all machineguns

Manufacturer: General Dynamics

Cost: 16,400,000 credits

Naval Vessels

Arleigh Burke Class Destroyer

This is the second most powerful destroyer (later re-designated as a cruiser) built before the inclusion of Overtechnology. This guided missile destroyer was built around the AEGIS and SPY-1D multi-function phased radar array.

Length: 155m

Beam: 13m

Height: ?

Weight: 9,200,000 kg

Speed: 56 kmph

Crew: 23 officers, 300 crewmen

Weapons:

Vertical launch ASROC missiles

Six Mk-46 torpedoes (two triple-tube mounts)

Two 127mm Mk-45 lightweight gun

Two 20mm Phalanx CIWS [+1 WA, 7d10 Hits, Clip 300, BV 5, Range 500m, SP 20, 75 SDP, Anti-Missile, AP]

RIM-162 Sea Sparrow missile

AGM-84 Harpoon

Manufacturer: General Dynamics/Bath Iron Works Division/Northrop Grumman Ship Systems

Kitty Hawk Class Supercarrier

The Kitty Hawk supercarrier is a large aircraft carrier designed in the 1950's. It carries an impressive 85 aircraft.

The Kitty Hawk (ship designation) was commissioned in 1961, and was destroyed in 2008 by the AFOS.

Length: 323.8m
Beam: 39m (76.8m at extreme width)
Height: ?
Weight: 60,000 t
Speed: 65 kmph
Crew: 4,582 total
Weapons:

RIM-7 Sea Sparrow Missile

Manufacturer: ?

Chapter 4 – UN Capital Ships & Large Vessels

As outlined above, mecha and capital ships use advanced thermonuclear reaction engines, which do not need an effective fuel payload. Most capital ships can function at full capacity for 15 to 30 years or more before their fusion engines need new material. The majority of colony ships have a docking port for an Ark Royal Escort Carrier (or either a Clemenceau or Northampton). While the Ark Royal is attached, all functions of the colony ship are controlled from the bridge of the Ark Royal.

All UN Spacy warships and colony ships are equipped with pinpoint barrier systems, and most have advanced medical and science facilities.

There is some conflicting information found in regards to the class name of some of the warships. For instance, the Ark Royal escort carrier is also listed places as the Uraga escort carrier, and the Northampton stealth frigate is also listed as the Bolognese. In all cases, the differences in the classifications are all names of individual vessels of

that particular class. In such cases, the more commonly used name is used – which is also the designation that was not given as a specific vessel name.

Class	Other class listing seen
Ark Royal	Uraga
Northampton	Bolognese
Haruna	Algenicus
Clemenceau	Maizuru, Guantanamo
Beginhill	West Point

Colonial Ship Generations

In Macross Frontier, the Frontier is called a 5th generation vessel; and assuming the Megaroad is the 1st generation, a progression goes like this:

1st Megaroad
2nd New Macross (Macross 5, Macross 7)
3rd Mid Generation New Macross (Macross 11, Macross 13)
4th Late Generation New Macross (Macross Galaxy)
5th Super-Scale New Macross (Macross Frontier)

* This doesn't always make a lot of sense, particularly when the Galaxy and Frontier launched -before- the Macross 7 and later....

Optional Systems

Self Destruct

This is a system installed in all UN mecha and ships that is used to prevent UN technology from falling into the wrong hands – primarily those of the Anti-UN forces. The self destruct causes the nuclear powerplant to overload and destroy all systems within the frame, and reduce the structure to slag. This system takes up no spaces, costs 50 CP, and has a timer that can be set anywhere from instant to 1 hour. This will instantly kill anyone inside the vessel, and is treated as a 400K nuclear missile with Blast 10.

Hypervelocity Launcher

This is VF launching platform that telescopes up from a concealed bay in a vessel. The VF units mounted in the launcher are suspended in a miniature anti-gravity field to allow them to launch out at full velocity so they do not need to waste precious moments accelerating into battle. These launchers are reserved for elite units such as Diamond Force or Emerald Force, and are only built into the New Macross Battle Carriers. One launcher can support a group of 3 VFs (or later, the sound boosters) and takes up 1 Space and costs 10 CP.

Holographic Day/Night System

This system uses an overhead holographic projector in the roof of the ship to simulate a natural day/night cycle. This helps to ease the inhabitants of a ship and give them a sense of time passing. This is integrated through the hull, and has no Kills or CP, and will continue working as long as the ship has power, although a sufficiently heavy hit against the hull may disrupt it for 1d4+1 minutes.

Stealth ECM Suite

Some special forces vessels have a powerful ECM suite to help with covert missions. While it is technically ECM, in Mekton it counts as active stealth (as per VF system) that only works against other capital ships. Variable fighters and other mecha, as well as Protodeviln (or other biological creatures) are not affected by the system. This system has a cost multiplier of x0.8.

Units with active stealth can only be spotted visually since they are "invisible" to capital ship sensors, and cannot be detected by pulse or magnetic detectors. Furthermore, the beam refraction reduces all energy weapon damage by 100K to a minimum of zero.

When the vessel takes internal damage, there is a 1-2 chance on a d10 that the system fails and cannot restart until the vessel undergoes repairs.

Low Visibility Paint Scheme

This works exactly like the Mekton-scale version, except that the -4 penalty is for every 10 hexes. This penalty is *reduced* by -1 for every hull class (or additional 1 million tons beyond; see Chapter 13). Again, this is cosmetic and costs 10 CP.

Pinpoint Barrier System

Much like the mecha scale PPB, the shields of UN capital ships are not all encompassing. Each shield is approximately 33m in diameter, and requires a parry roll to successfully block an attack (AGIL + Reflector Systems + 1d10 or Crew Grade roll). The shield is projected approximately 10m out from the hull. The shield cannot fully block beam weapons with the wide angle trait, and will still suffer half damage. If a capital ship properly lines up all four barriers, they can attempt to block a heavy particle beam cannon (see the Combat chapter in the basebook). Furthermore, the transformable vessels such as the New Macross class can use their barriers to perform the Daedelus Attack.

Autofactory System

This system is for large-scale ships that have onboard factories for manufacturing plants to be able to produce weapons, armor and mecha. Although this is listed with the UN Spacy, the Zentraedi Fully-Automated Weapons Manufacturing Satellites also have large-scale autofactories.

Production Rate: Each space dedicated to the autofactory at Mekton (1:1) scale, the mecha can produce 1000kg or 1 CP per TL per Time Rate.

Cost: It costs 5 CP per Space dedicated to the autofactory at Mekton (1:1) scale.

Tech Level Rate: This assumes standard 8-hour/day shifts at Mekton (1:1) scale.

TL 4 1 CP/year
TL 5 1 CP/30 days
TL 6 1 CP/7 days
TL 7 1 CP/day
TL 8 1 CP/12 hours
TL 9 1 CP/hour
TL 10 1 CP/minute

Thus at TL 10 a 500 CP mecha would take 500 minutes (8 hours, 20 minutes) to build from start to finish.

Limits: This system is only available at TL4 and higher.

1 Space can only produce up to 1/10th scale products (human scale)
5 Spaces can only produce up to 1/5th scale products (roadstriker scale)
10 Spaces can only produce up to 1:1 scale products (Mekton scale)
100 Spaces can only produce up to 1:10 scale products (corvette scale)
1000 Spaces can produce up to 1:100 scale products (starship scale)

The spaces limit is the minimum spaces needed in order work to the maximum scale size it can produce. This limits a Mekton with the autofactory subassembly from being able to manufacture starships, unless the Mekton builds the starship in modules of up to its maximum size. So if the Mekton has 1 Space dedicated to the autofactory, with enough raw material laying around, the Mekton can only produce a module of up to 1/10th scale or 1 Space at 1:1 scale at a time. This would take a Mekton working by itself a very long time to build a starship, but not impossible. The mobile factory ships have a long boom that is used to support the keel/hull of a starship, ignoring this limitation for building other capital ships.

Optional Rules

* Manufacturing takes as much CP as the final product will be, but it only costs 30% of the actual material costs to build it.
* Manufacturing can be increased by either increasing the minimum shift crew to double (increase production rate by Crew/Minimum Crew) or increase from one shift per day to two or three shifts per day (production rate x2.0 and x3.0, respectively).
* Conversely, the production can be reduced to a skeleton crew, which is 1/2 the minimum number (production rate decreases by Crew/Minimum Crew) or reduce the shift to a half-shift per day (cut production by half).
* Prototypes take x4.0 time and cost x1.4 CP.
* Limited editions (less than 1000 units) will take x2.0 time and costs x1.2 CP.
* Recycling of scrap or salvage takes x1.5 production time but costs x0.5 normal. Only 95% of material is ever reusable.

Autofactory Modifiers

Assembly Dedication: The more specific an autofactory is dedicated to one type of product, the faster it can be cranked out.

Omni [x1.0 cost, x1.0 production] - An autofactory, unless specified is considered to be omni, meaning it can construct anything. Retooling to change production takes 1d10 hours per 100 CP production rate.

Category [x0.8 cost, x2.0 production] - The autofactory is set to produce a set category of product, such as clothing, hand weapons, variable fighters, etc. Retooling to change production takes 1d10 hours per 50 CP of production.

Specific [x0.6 cost, x3.0 production] - The autofactory is set to make a specific item, such a VF-11C or 55mm AP ammunition. Retooling to change production takes 1d10 hours per 20 production rate.

Cannot be Retooled [x0.5 cost, -x1.0 production] - This type of autofactory cannot be adjusted to produce anything other than what it was originally constructed to produce. If you want to change production, you must build a whole new factory.

Tech Level Difference: An autofactory production rate is affected by the TL of the object to be produced.

+3 TL or higher cannot be mass produced

+2 TL = x0.5 production rate
+1 TL = x0.8 production rate
-1 TL = x1.2 production rate
-2 TL = x1.5 production rate
-3 TL or less = x2.0 production rate

Crew Requirements: If set on anything other than a military ship, crew must be paid at least minimum wage. No autofactory can run for more than 120 hours at a time without a 48 hour rest period for maintenance.

TL	Crew/Production Rate (Mekton Scale)
4	100/CP
5	10/CP
6	1/CP
7	1/10 CP
8	1/100 CP
9	semi-automatic; only supervision is required
10	fully automatic; no supervision required

Crew Efficiency: For large-scale mass production facilities, ranging over 100 Mekton-scale Spaces, crews required to keep the production going may not be as efficient as desired. The difference between the crew's efficiency and 100% of the TL is the Faulty Potential (Flaw) that each product will have something wrong with them, and the efficiency is equal to how much of a decreased cost is made to manufactured products. The Flaw can be repaired, although it will take as long as it did to manufacture to discover the mistakes. The Fatal Flaw is 10% of the Flaw (fatally flawed products are only good for recycling).

TL	Minimum/Maximum
4	35%/95%
5	45%/95%
6	55%/95%
7	65%/95%
8	75%/95%
9	85%/95%
10	95%/100%

Typical Autofactory Setup

1 Raw Materials Extraction - some kind of mining facility to acquire materials
2 Recycling - breakdown & extraction of raw materials from failed products
3 Raw Materials Refinery - convert raw materials into useable materials
4 Main Autofactory Assembly Lines
5 Storage & Warehousing
6 Showcasing & Deployment

Example:

In the Fabinini Starship, the crew aboard require the new Adorian Squeeze Bulbs, they have the 2 spaces dedicated to the autofactory and require 2000 units. The autofactory requires normally only requires an assembly crew of 20 a shift [200 t / 10 t = 20], but with the urgency the assembly line is placed on full speed with an additional 10

crew members a shift. The Crew Efficiency is 85%, making the Flaw 15% [100% -85% = 15%], Fatal Flaw 1.5% [15% x0.1 = 1.5%], and the cost to be x0.85 as costly. The Bulbs normally cost 4 CP each to build and weighs 4 t. The autofactory aboard ship can now build 900 t a day [200 t x(30 shift crew /20 min. crew) x3 shifts]. Therefore the Fabinini starship can build the Bulbs in about 9 days [4 t x 2000 units / 900 t = ~8.89 days]. Unfortunately the Fabinin Starship is a little short in the Raw Materials needed by 2000 CP.

For the sake of the Example the Fabini Starship has these stats:
[TL 7; Heavy Striker class; 1000 K; 100,000 ton; 2 Spaces dedicated the autofactory.]

UN Vessels

UN Spacy Warships: Ark Royal Escort Carrier, Northampton Stealth Frigate, Clemenceau Stealth Carrier, New Macross Battle Carrier, Oberth Space Destroyer, ARMD Space Platform, SDF-1 Macross, Haruna Stealth Cruiser, Daedelus II, Macross Quarter, Deneb Battleship
UN Spacy Colony Ships: Macross Colony Ship, Beginhill Training Ship, Sunnyflower Agricultural Platform, Einstein Research Ship, Riviera Marine Research Ship, Mark Twain Resort Ship, Heaven Cemetery Ship, Hollywood Amusement Ship, Three Star Mobile Manufacturing Platform, Iowa Provisions Supply Ship, Megaroad Colony Ship
UN Naval Ships: Prometheus Carrier, Daedelus Landing Ship, Asuka II Aircraft Carrier
Other: Automated Factory Satellite, Galaxy Patrol Ship

Ark Royal Class Escort Battle Carrier

The Ark Royal is one of the more numerous fleet vessels, with one attached to most colony ships as a control center and to provide protection. Each Ark Royal carries almost 400 VF mecha and also has several weapon systems including cruise missile launchers, intermediate-range missile batteries and retractable laser turrets similar to those of the old-style Zentraedi vessels.

ARMD Space Platform (Armaments Rigged-up Moving Deck)

The ARMD was the UN's first attempt at a space weapons platform and VF carrier. The ARMD has a fairly impressive array of weapons, and its main failing point in Space War I was the UN's lack of experience in space warfare rather than inadequate weapons. After the end of Space War I, the Prometheus and Daedelus were removed from the Macross and a pair of ARMD platforms were attached in their place.

Only ten were built originally, with all of them being destroyed or crippled in the first skirmish with the Zentraedi fleet. When the Macross was overhauled in 2012, the ARMD 01 and ARMD 02 were rebuilt and made permanent attachments to provide additional close defense and flight decks for the new UN headquarters.

Asuka II Aircraft Carrier

Advanced small-scale stealth nuclear aircraft carrier developed by the United Nations government. It became the de facto mobile base of first VF-0 special duty combat test unit (Skull Team), deployed in 2008. In addition, engineers assigned to the VF-0 development and maintenance were transferred aboard this ship to maintain these

difficult units. Features a two-bridge design and Aegis system. The Asuka was one of the first earth-built vessels to use hyper-carbon alloy armor.

Automated Factory Satellite

In October 2011 at the suggestion of Vrlitwhai Kridanik, the UN Spacy made a surprise attack against the Zentraedi controlled factory satellite, with the intent of seizing it from them and using it to build up Earth's defenses against possible further attacks from rogue Zentraedi or Meltrandi forces. Using a culture shock attack against the satellite's crew and defenses, with Max Jenius and Miriya Fallyna Jenius breaching the hull of the satellite so as to bring the culture attack directly to the crew inside by exposing them to their daughter Komiria Maria Fallyna Jenius, the Factory Satellite fell quickly to the UN Forces. Folding it back to the Sol System, they folded it into the Lagrange point between Earth and the moon providing an excellent defensive position.

The factory has been repaired and refitted to build current UN mecha and capital ships as well as hosting an entire city in the upper portion. It is here that many Zentraedi and Meltrandi who cannot adjust to Earth's culture prefer to live and work, with approximately 70% of the workforce being macronized Zentraedi. The satellite has been equipped with more docking ports, weapons and is also protected by a full three UN fleets for additional protection.

Beginhill Military Training Ship

The Beginhill is designed to train new military personnel while en route to a colony. A typical military cadet's career begins with a rigorous 6-week basic training course, followed by specialization courses that can take anywhere from 6 months to 4 years depending on the cadet's position. In wartime the time it takes to train new recruits can be reduced up to 50%, though such accelerated courses are much more stressful on the cadets than the standard ones. Beginhill vessels can train recruits for any UN Spacy military profession, from foot soldier to VF pilot. All military personnel are required to spend 2 weeks per year taking classes to learn any new techniques and information they need.

The Beginhill also possesses powerful ECCM and communications suites, and can act as a fleet command vessel should a colony fleet lose their New Macross Class Battle Carrier. Due to the importance and military sensitivity of this ship, each Beginhill carries 8 squadrons of VF (96 mecha) and has an escort of 8-12 Clemenceau or Northampton vessels in addition to the normal fleet escort.

Clemenceau Class Stealth Carrier

The Clemenceau is an upgraded version of the old ARMD platform, rebuilt after UN Spacy learned from Space War I. It is the most common carrier in service, carrying 10 squadrons of VF fighters. Clemenceau frigates are usually set to escort a colony fleet vessel that does not have an Ark Royal in case it becomes separated from the fleet.

Daedelus Semi-Submersible Landing Ship

The Daedelus was designed as a submersible troop transport and sister ship to the Prometheus. The Daedelus can maintain a prolonged dive up to 4.8km (5.4km crushing depth, 4.2km cruising depth). While the Prometheus was designed primarily as an aircraft

carrier, the Daedelus was meant to carry destroids, tanks and other infantry units. The Daedelus has life support and supplies for a full crew compliment for up to 2 years underwater. The UN military is quite happy with the design and has no plans to retire it. Like the Prometheus, the Daedelus is a main part of the UN Navy and EDF as well as being used on colonies.

Daedelus II

After the conclusion of Space War One, the UN Spacy began a wide ranging fleet reconstruction program. Other than Zentraedi and Meltrandi ships, few UN Spacy ships survived the war. Unlike with the first generation of UN Spacey ships, Earth's understanding of Overtechnology had come a long way. The decision was made to create new designs, that would better be able to utilize Overtechnology, as well as incorporating tactical lessons learned during the previous years.

One of the first new designs was the Daedelus II. Based on the concept that the original Daedelus was tasked for once it was attached to the SDF-01. Zentraedi and Meltrandi ships have powerful defenses and a strong outer hull. However, internally they are rather weak, the emphasis on combat outside the ship. The Daedelus attack performed by the SDF-01 took advantage of this weakness. By ramming the enemy ship and puncturing the hull, then firing massive amounts of reaction warheads internally, the Daedelus could destroy a much larger enemy ship.

The Daedelus II uses the same combat doctrine. It has four forward bays that open to reveal a combination of reaction warhead systems and mecha bays. The ship is built along a similar design concept as the earlier ARMD Space platforms. The Daedelus II is built to ram enemy ships, open the bays, and release the reaction arms, or perform boarding actions to take over special targets. The ship is equipped with a large contingent of ground mecha for its primary purpose. It has a relatively small contingent of VF fighters as a trade off. The Daedelus II can perform the Daedelus Attack up to ten times before needing structural repairs and armor replacement on the front hull.

In 2036 when the Neld Zentran/Meltran fleet attacked, the Class ship herself, Daedelus II, successfully attacked and destroyed the lead Octy-Gundoula flagship leading the advanced forces. In 2037, when the accompanying Burado and Leplendis fleets attacked, the second ship, Prometheus II was instrumental in leading to the ultimate victory of the UN Spacey forces.

Deneb Battleship

Standard frontline battleship of the Macross Galaxy fleet.

Dulfim Carrier

Standard carrier of the Macross Galaxy fleet.

Einstein Research Ship

The Einstein Research Ship works closely with the Sunnyflower and Riviera vessels when determining if a planet is capable of supporting a colony. It also works with the Three Star Mobile Manufacturing Platform for designing new mecha systems. The Einstein has a docking port for an Ark Royal Carrier. The Einstein works with dangerous chemicals and elements and has the most sub-compartmentalization of any colony ship to

restrict damage and casualties in the event of a toxic spill or hull breech. There is one Einstein ship in each colony fleet.

Galaxy Patrol Ship

The Galaxy Patrol Ship was designed to act as a patrol ship for off world colonies, concentrating primarily on search and rescue and Customs patrols. The ship is based upon the hull of the Sentinel Class Stealth Carriers but has none of the stealth capabilities of that vessel, or variable fighter storage/hanger facilities. The ship is armed with a tri-barreled laser cannon mounted in the fore section of the ship and missile launchers for defense purposes. It is also equipped with an advanced radar system as well as an emergency ready medlab facility for rescue purposes and procedures. As they are cheap to produce and easy to maintain these vessels are commonly found protecting the more remote colony worlds of the United Nations Government.

Haruna Stealth Cruiser

Design and production beginning in 2013 the Haruna Class Cruisers are the one of the first design of the UN Spacy to emerge after Space War II. Built on the captured factory satellite the Haruna cruisers are heavily influenced by Zentraedi and Meltrandi designs, being something of a mixture of styles culminating in an overall aesthetically pleasing vessel. The ship itself is heavily armed with anti-warship missiles, but it lacks large numbers of anti-warship cannons for offensive or defensive purposes, it does however have three dual barrel particle beam cannons to assist in the ships defense. The Haruna cruisers are not intended for heavy starship combat, and certainly not intended to go head to head with the enormous Zentran and Meltran battleships, it can however defend itself adequately enough with the weapons it has. Its weapons are designed for defense, rather than offense, with the large numbers of anti-warship missile launchers sequestered in the booms on the side of the ship being the primary weapons system.

Heaven Cemetery Ship

Many of the colonists prefer to keep the tradition of burying their dead, and each colony fleet includes one Heaven Class Cemetery Ship. The Heaven ship is smaller than most other colony ships, and cannot dock with an Ark Royal. Instead, the underside of the Heaven ship has a docking mount for a Northampton Class Stealth Frigate.

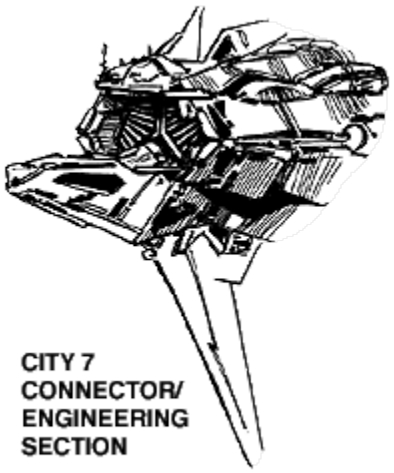
Hollywood Amusement Ship

This particular colony ship is of a spherical design with a docking port for an Ark Royal Escort Carrier. Each Hollywood Ship is divided into three sections. The topmost section contains several amusement parks, arcades, restaurants, VR theatres, movie complexes, and almost any form of entertainment desired. The middle section contains the powerplant, systems controls and living quarters for the 200,000+ permanent residents. The lower section contains a multitude of sound stages, recording studios, prop storage, computer sets for 2D and 3D rendering and all other entertainment-related needs. The Hollywood also has a powerful communications relay for use with the Galaxy Network.

Iowa Provisions Supply Ship

No data found. I presume the Iowa class colony vessel is little more than a storehouse of nuclear fuel for the ships' reactors, raw materials, stored foodstuffs, hard to manufacture parts, and surplus equipment. Since such a supply ship would be vulnerable and necessary to a fleet, each Iowa supply ship would likely have an escort of 2 to 4 Clemenceau stealth carriers.

Macross Colonial Ship



This is the main vessel of the colony fleet designed for long-distance colonization; being a city containing 350,000+ colonists. The Macross Colonial Ship has a docking port for a New Macross Class Battle Carrier as the command center of the entire fleet. The Macross ship features a transparent dome to allow the colonists to view space as the night sky, and a powerful holographic system on the interior of the protective dome to create a daytime sky effect to give the colonists a day/night cycle. The city section is a little over 50 square kilometers and have residential sections, parks, shopping centers and most of the features found in permanent cities. Around the lower perimeter up to five additional "pods" can attach to provide additional living space, parks and other last minute additions; however, these additions are not protected by the protective shell. Many of these additions are similar to the slums of larger cities. Since 2030, there have been 14 Macross Colonial fleets launched (as of 2045).

There are large differences between individual fleet ships. The Macross 5 was designed by Zentraedi and incorporated a large amount of Zentraedi technology, as well as their more organic appearance. The Macross 5 fleet also had two additional Macross-class colonial ships with their own battle carriers.

Macross Frontier

Newest class of colonial ship (stated this is 5th generation) with a 100% recycling biosystem, greatly reducing the need for resupply stops.

The enormous Macross Frontier colony fleet consists of the Battle 25 attached to the front of the massive Island 1 some 15 kilometers long (much larger than City 7, which was some 6 kilometers in length). Nearly half of the 10 million residents of the Macross Frontier fleet reside in Island 1 under a dome some 2,000 meters in altitude. The ground levels feature metro areas, hills, rivers, and oceans. Sky city is located on the ceiling of the dome while there are several levels underground with residential zones and storage space, gravity generators, propulsion systems, and so on. The shell remains up normally but is closed during battles and space folds. A large cluster of other, smaller domed Islands are also attached directly to the Macross Frontier in two large chains trailing behind the Island 1. Island 3 is noted to contain an agricultural area, the Zentraedi mall Formo and an alien lifeform laboratory. In times of crisis, the individual Islands have defensive shutters that envelope the dome to protect those inside.

Macross Galaxy

Later version of the Macross class colonial ship. It is stated that it uses a chemical plant for recycling, giving the air a bad smell. A large percentage of its population are cyborgs and the vessel sees use of many automated control systems. The command bridge is redesigned to look like the head of a VF-27.

Macross Quarter

This 400m long transformable vessel could be considered to be a pocket battleship. It has superior maneuverability and firepower. The Quarter is attached to the Macross Frontier fleet under command of the S.M.S. civilian military provider group.

Mark Twain River Boat Vessel

The Mark Twain casino ship is one of the smallest of the fleet, being only 300m in length and designed to look like a classic riverboat. The Mark Twain has no weapons, no docking port and no mecha compliment. This vessel provides no commodities to the fleet, and is nothing beyond a portable version of Las Vegas.

Megaroad Colonial Vessel

The first Megaroad was refitted from the half constructed SDF-02. The Megaroad colony ship was in service from 2012 to 2030 with 1 or 2 such fleets launching each year. The Megaroad-class colony vessels are immense ships, over 30% longer than Zentraedi Nupetiet Vergnitzs-bis command cruiser and with much greater internal volume. The front part of the spacecraft is hollow and contains an entire city that is much larger and more spacious than the one constructed by the Macross citizens trapped aboard the SDF-1. The colony-city can hold up to 80,000 colonists in relative comfort, with citizens enjoying a fairly high (if not luxurious) quality of living. The rear portion of the Megaroad vessels house the command tower, variable fighter landing bays, power systems, and engines of the spacecraft, as well as living quarters for the military pilots and crew. Megaroad-class vessels are not designed to engage in direct ship-to-ship combat with enemy forces, as this would greatly endanger the civilian colonists aboard. Therefore the armament of the colony ships is fairly light, instead relying upon their fighter wings and escort vessels to protect them from harm. The Megaroad ships still serve as flagships for the colony fleets however, and contain an impressive array of sensors and communications gear to help them command and coordinate battles. Captains of Megaroad-class vessels are sworn to do everything they possibly can to protect the civilian lives aboard their vessels, and will not place their ships in danger if they can at all avoid it. Designed for short-range colonization within 100 light years of earth.

Neo Nupetiet Vergnitzs-bis

Only a handful of these vessels survived and were rebuilt after Space War I. They were refitted to accommodate micronian crew as well as macronian crew. These behemoths retain their vast array of weapons and each one carries close to five thousand mecha. The first Megaroad colonial fleet was escorted by a few of these, and one was part of the destroyed Macross 5 colonial fleet. The Neo Nupetiet Vergnitzs-bis has the addition of an external dorsal bridge to the fore with secondary bridge to the aft and additional antennae including two main dorsal antennae aft of bridge and one main ventral antenna.

New Macross Battle Carrier

The New Macross Carrier is an upgraded Ark Royal Carrier that was made to be transformable like the original Macross, and is the only ship in the fleet that is equipped with a heavy particle beam cannon. Like the Ark Royal, the New Macross carries over 32 squadrons of VF mecha and has several weapons systems. A new feature found on the Ark Royal Carrier is that the particle beam cannon is built as a separate gunship that becomes a “hand held” gunpod-like weapon that can be dropped/ejected in the event of an overload.

Each fleet tends to modify their flagship to suit their needs, such as the flagship of the Macross Galaxy fleet having more automated systems and the bridge resembling the head of a VF-27.

Northampton Class Stealth Frigate

The Northampton Stealth Frigate is currently the most common warship in use by the UN Spacy fleet. These vessels are designed for a variety of different missions, including escort, patrols, reconnaissance, and front-line combat duty. The frigates are fairly cheap to build and maintain compared to other warships such as the Ark Royal and New Macross battle carriers but still provide ample firepower and protection, as well as the ability to carry 4 full squadrons of VF mecha into combat. Northampton frigates are also the smallest warships equipped with advanced ECM and electronic warfare systems, thus leading to their designation as stealth frigates. The ships are a common part of every UN Spacy military and colonization fleet, and are also assigned to most frontier colony worlds in order to both provide protection from pirates and other external threats and to keep order among the colony's commercial shipping. Northampton frigates were first launched in 2028, and are still produced by most UN Spacy shipyards at a rate of several dozen per year.

Northampton Stealth Frigate Zentraedi Variant

This is a basic Northampton with some features redesigned with a Zentraedi flavor, giving it the more rounded “organic” look of original Zentraedi ships rather than the angular diamond profile of the original Northampton. This was the main escort vessel of the Macross 5 colonial fleet.

Oberth Space Destroyer

The Oberth was the first vessel the UN attempted to build from scratch. A total of 125 Oberth destroyers were built during its production run from 2009 to 2010, although not all of them were accounted for at the end of Space War I. The Oberth carried a payload of 18 cruise missiles and had a set of four railguns mounted on the nose for extra firepower. After Space War I, the remaining Oberth were refitted with energy weapons in place of the railguns, and were upgraded with better sensors and engines. Despite the upgrades made, the Oberth was retired as a relative failure.

Prometheus Semi-Submersible Attack Carrier

Since their inception, Aircraft Carriers have ruled the seas. The Prometheus Class Semi-Submersible Attack Aircraft Carrier is no exception. The CVS-101 Prometheus, the

first of this class had its keel laid down June 18th 2003, was commissioned December of 2005, and launched 21st September 2007. Utilizing the new technology derived from the investigations of the SDF-1 the Prometheus was designed with much greater tolerance and capability than any previous aircraft carrier. To this date, the UN has been very happy with the performance of the Prometheus and has no desire to replace it. The Prometheus also sees a good deal of use on colony worlds. The Prometheus can dive to depths of 2.4 km and remain underwater for up to 14 months.

Riviera Marine Resort Vessel

The Riviera Resort Vessel is one of the most advanced civilian vessels ever designed for UN Spacy colony missions (outside of the *New Macross* city vessels). The colony ship is shaped like a giant spiral seashell and contains an artificial ocean surrounded by over 10 km of simulated beachfront property. The ocean provides the citizens of the colony fleet with a wide variety of water sports, including swimming, yachting, surfing, jet skiing, and trolling. Artificially generated waves of varying strengths produce areas of shoreline that are calm or choppy to suit the tastes of the vacationer, while the life support systems keep the temperature of the vessel at a pleasant summer temperature with a refreshing breeze rolling in off the water. The hotels and restaurants along the shoreline are regarded as the most luxurious in known space and are extremely popular among the colonists.

The Riviera also provides an essential function to the fleet by producing kelp, seaweed and various fish and seafood for the fleet. Because of the strict environmental requirements of the simulated ocean and the sea life contained within it, Riviera vessels have extremely advanced and fault-tolerant life support systems. The vessels are highly compartmentalized, and in the event of a hull breach or other damage large sections of the ship can be completely sealed off to prevent loss of environmental control in the intact areas. Each Riviera has an Ark Royal Escort Carrier docked to it.

SDF-1 Macross

This is the original Inspection Army Meltran gunship that crashed on South Ataria Island in 1999. The SDF-1 was rebuilt and reverse engineered over a period of almost 10 years, giving humanity a great deal of overtechnology to fight the Zentraedi fleet. After the destruction of Boddole Zer, the SDF-1 was repaired and had a good portion of the midsection rebuilt to be a command center for the newly founded New Unity Government stationed in Alaska.

During the course of Space War I, the SDF-1 went through several transitions. When the SDF-1 space folded out to Pluto, the space fold generator was lost and was never replaced. This caused the SDF-1 to lose a section of power conduits, forcing the crew to alter the ship into Storm Attacker configuration, or “battroid” form, to fire the main particle beam cannon. Later, when the SDF-1 crew finished rebuilding the omni-directional barrier, it overloaded, and from the lingering effect the scientists aboard the SDF-1 were able to develop the PPB system.

In 2012 the SDF-1 underwent a major overhaul, including the replacement of the Prometheus and Daedelus with a pair of ARMD carriers. The overhaul also removed the makeshift Phalanx torso mounts with a proper CIDS. The SDF-1 has not been transformed out of Storm Attacker configuration since the end of Space War I.

In 2040, the SDF-1 was taken over by rogue AI Sharon Apple. With the aid of Yang Neumann, Isamu Dyson was able to exploit a weak spot in the armor near the communications array on the bridge and end her control over Macross City (the weak armor has been reinforced, and safeguards have been added to prevent another takeover since then).

In 2051, the SDF-1 is destroyed by the Earth defense grid when it was hijacked by terrorists (semi-canon). As shown in Macross Frontier (2059), the SDF-1 is apparently rebuilt. Also as shown in Macross Frontier, additional Macross class vessels were built and sent with other fleets.

SDF-04 Global

The Macross SDFN 04 Global was attached to the 117th Research Fleet operating in late 2040s. It was publicly declared in 2048 that a fold navigation error lead to the destruction of the *Global* and the other fleet ships, but the truth was far more disturbing. The 117th Research Fleet encountered the hostile Vajra for the first time in 2048. Ranka Lee was supposedly the only survivor from that fleet and she has no memory of her early childhood as the result of mental trauma from the deaths of her father, mother and brother. Some 11 years later, the Macross 04 Global is found seemingly abandoned on the surface of Gallia 4 by Warrant Officer Alto Saotome of the SMS and civilian Ranka Lee. Upon exploring the interior of the craft it is found to be a portion of a Vajra hive. The *Global* and the rest of the hive is destroyed as an entire Vajra fleet emerges from beneath the surface of the planet, attains orbit and commences a space fold. Just prior to the Vajra fleet departing, a Dimension Eater is unleashed on the surface of the planet, destroying a New UN Spacy base, the attached Zentraedi marine battalion and most of the planet itself. Thus how long the *Global* had been on Gallia 4 or how it arrived on the planet will likely remain a mystery.

The Global had a pair of ARMD carriers docked, identical to the SDF-1 Macross.

Sentinel Stealth Attack Carrier

The Sentinel Class Carrier is the newest and smallest addition to the UN Spacy Fleet, having only begun to be produced recently. Although this 114 meter Carrier is designated as a Stealth Attack Carrier is certainly not a front line combat vessel and is designed for Special Forces and reconnaissance missions where its speed and stealth are paramount to the completion of its mission. The Sentinel Carrier carries only a small complement of Variable Fighters for reconnaissance purposes, or Special Forces missions. These fighters are always stealth capable fighters, usually VF-19 Excalibur or VF-22 Sturmvogel, for Special Forces assignments; or VF-17 Nightmares for fleet reconnaissance. Only a handful of these vessels have been manufactured and assigned to specialist units, however the UN Spacy plans to put more into production in the near future.

Sunnyflower Agricultural Platform

The Sunnyflower Class Agricultural Platform is probably the second most essential part of the entire New Macross Class Colony Fleet. Where the Riviera vessels provide water, fish and recreational facilities, the Sunflower provides the food for the fleet's 1 million or more inhabitants. Without this essential platform the entire Fleet

would starve to death within a few short weeks. The interior of the Sunflower platform resembles a giant greenhouse with various fruits and vegetables growing under the light filtering through the semi-transparent Dome. Animals are also kept within the confines of the platform for manure and fresh meat purposes.

The Sunnyflower has a docked Clemenceau carrier for control and protection. The second line of defense is the 14 shield sections that give the Agricultural Platform its name. In shell down mode the 14 shield sections are down and cause the platform to resemble a sunflower, which the ship is named after. In the event of an attack these sections immediately and swiftly come up to cover the semi-transparent dome of the vessel to encase it in a shield of armored plates.

Three Star Mobile Manufacturing Platform

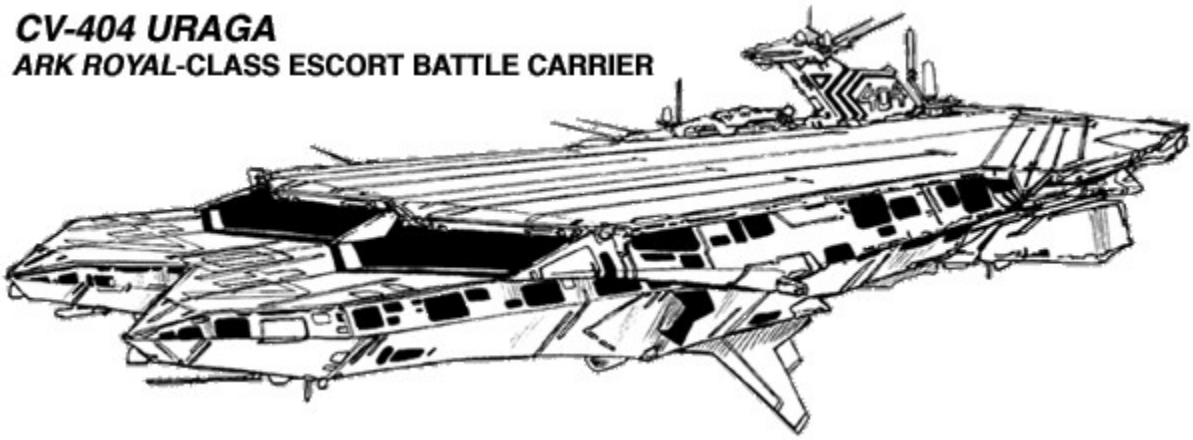
The lower levels of the ship contain a complete refinery that can extract all necessary metals and raw materials from space debris such as asteroids and comets. These materials are then raised to the core of the starship, which contains a complete manufacturing facility based on technology recovered from the Protoculture factory satellite captured by the UN Spacy in October 2011. The automated factory can manufacture almost any component, from miniaturized microchips to complete mecha. The factory can even manufacture from scratch capital starships such as a New Macross battle carrier. However this process can take months depending on the complexity of the starship (a New Macross battle carrier will take almost a year to build from scratch while utilizing the complete resources of the platform during that time). The Three Star facility is of course capable of conducting routine repair and maintenance on starships as well to prolong their active lifespan. A large beam is mounted from the rear of the ship which serves as a dry-dock for starship repair, refit, and construction. The Three Star crew complement of the ship includes a trained engineering staff of over 1,000 along with the most advanced CADAM (computer-aided design and manufacturing) systems available to the UN Spacy. In addition Three Stars maintain constant contact with other colony missions as well as UN Spacy headquarters via the Galaxy Network communications net, allowing new designs to be quickly shared across the UN Spacy fleet as they are developed. This permits even the most distant colony missions to keep up to their mecha and equipment up to date.

The Three Star can build or repair up to 10,000 CP worth of materials per week, although no more than 2,000 CP may be allotted to any single mecha or ship. Thus the Three Star can build several VF-11 Thunderbolts, work repairs on a damaged Northampton and also produce armor and weapons for infantry all at once.

Capital Ship Profiles

Ark Royal Class Escort Carrier

COST: 775,972 CP
Manufacturer: OTEC Company/Three Star Heavy Industries/UN Spacy



HEIGHT: ?
WIDTH: ?
LENGTH: 1815m
WEIGHT: 2,500,000 tons
CREW: 89 officers, 1849 crewmen, 378 VF pilots, 60 soldiers/security

Hull Class: MegaHeavy
KILLS: 2200
ARMOR: SP 110
SPACES: 22

MA: 34 (Mach 3)
Turn: +11
Crew Grade: A (16+1d10)

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Strike Missile (6)	F	700K	6,437,376	+1	90	U
Each missile takes 25K to destroy. Blast 15, Warm up 2						
Light Laser (24)	All	50K	123,597	+1	50	U
Missile Turret (12)	All	7K	1200	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
CIDS	All	10K	36	+1	--	U

Mecha/Shuttle Compliment

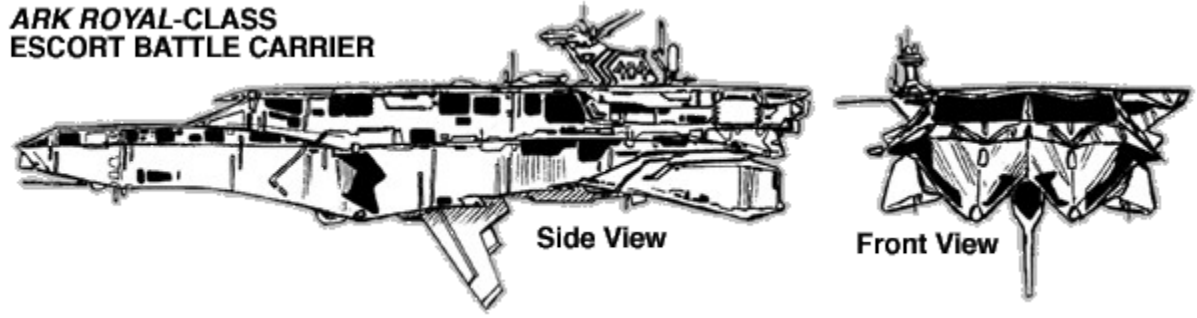
VF-11C	216
VF-11C Full Armor	24-48 can be upgraded
VA-3	24
VF-17	3

* This ship has an additional 24 VF-11C in storage, and can be readied in a few hours notice.

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (2,200 for 30 years)
Pinpoint Barrier System (medium), Antigravity Drive

Bays
Mecha: 2 bays (240 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 1 bays (6050 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0), Passive Stealth (x0.2)



Programme: Designed primarily as an escort and command for the Macross Class colony ship. A few of these vessels have been used as flagships for galaxy patrol fleets.

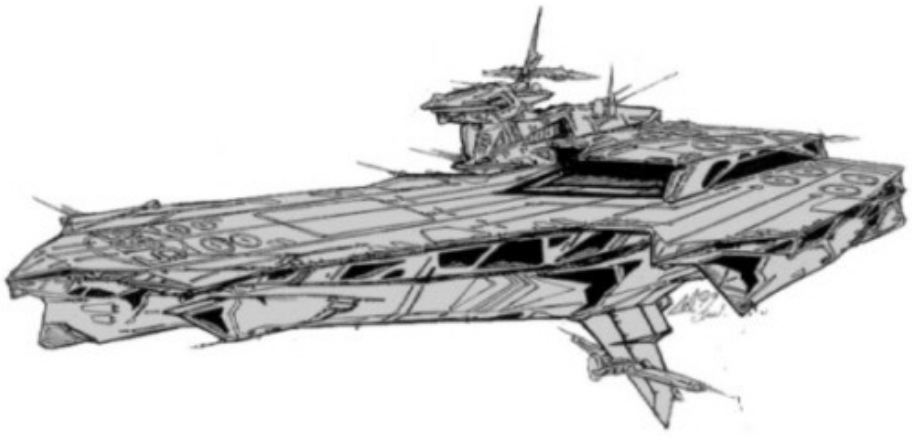
Notes: The Ark Royal is listed with a weight of 250,000 tons, which does not give it enough spaces for everything. If you wish to use the official weight, multiply the ship's cost by x1.5 for making it weight efficient.

Notable Ships of Class:

CV-404 Uraga (launched 2036 as part of the *Macross 07*, docked to Riviera, destroyed 2046 by Protodeviln)
CV-406 Brampton (launched 2036 as part of the *Macross 07*, docked to Hollywood)
CV-412 Aberdeen (launched 2036 as part of the *Macross 07*, docked to Beginhill)
CV-417 Keflavik (launched 2036 as part of the *Macross 07*, docked to Einstein)
CVS-720 Fahrion (part of Macross Frontier fleet)
CVS-707 Velagulf (part of Macross Frontier fleet)
CVS-670 Rakayou (part of Macross Frontier fleet)
CVS-761 Vandeglift (part of Macross Frontier fleet)
Megellan (part of Macross Frontier fleet)
Keiga (part of Macross Frontier fleet)

Ark Royal Class Special Forces Carrier

COST: 602,398 CP
Manufacturer: OTEC Company/Three Star Heavy Industries/UN Spacy



HEIGHT: ?
WIDTH: ?
LENGTH: 1815m
WEIGHT: 2,500,000 tons
CREW: 89 officers, 1849 crewmen, 378 VF pilots, 60 soldiers/security

Hull Class: MegaHeavy
KILLS: 2200
ARMOR: SP 110
SPACES: 22

MA: 34 (Mach 3)
Turn: +11
Crew Grade: A (16+1d10)

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Strike Missile (4)	F	700K	6,437,376	+1	90	U
Each missile takes 25K to destroy. Blast 15, Warm up 2						
Light Laser (18)	All	50K	123,597	+1	50	U
Missile Turret (8)	All	7K	1200	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
CIDS	All	10K	36	+1	--	U

Mecha/Shuttle Compliment

VF-11C	216
VF-11C Full Armor	24-48 can be upgraded
VA-3	24
VF-17	3
VF-19	2
VB-6	1

* This ship has an additional 24 VF-11C in storage, and can be readied in a few hours notice.

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (2,200 for 30 years)
Pinpoint Barrier System (medium), Antigravity Drive

Bays
Mecha: 2 bays (240 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 1 bays (6050 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0), Passive Stealth (x0.2)

Programme: The Ark Royal is listed with a weight of 250,000 tons, which does not give it enough spaces for everything. If you wish to use the official weight, multiply the ship's cost by x1.5 for making it weight efficient.

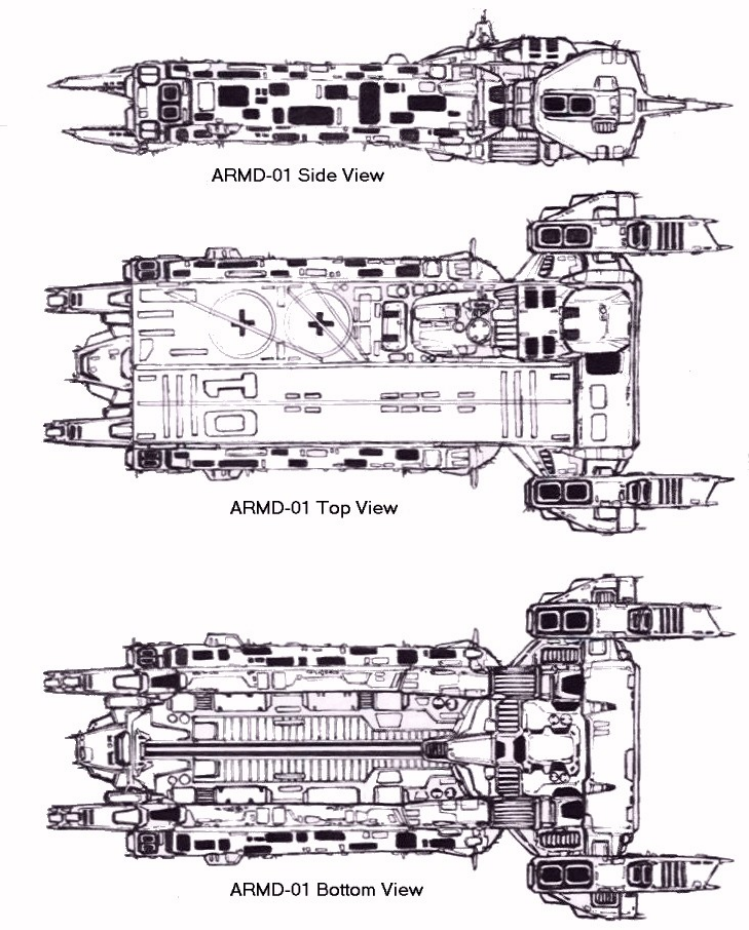
Variant of the standard Ark Royal designed for special operations.

Notable Ships of Class:

CV-565 ?? (command ship for the 727th Independent VF-X Unit (Raven) Alpha Team squadron)

ARMD Space Platform

COST: 486,213 CP
Manufacturer: OTEC Corporation



HEIGHT: 70m
WIDTH: 220m

LENGTH: 340m
WEIGHT: 174,000 tons
CREW: 1,000 personnel and soldiers

Hull Class: Heavy Striker
KILLS: 1000
ARMOR: SP 40
SPACES: 10

MA: 28 (Mach 2)
Turn: +5
Crew Grade: C (12+1d10)

System	Kills	Range
SL Communications	200	3,000 km
AH Sensors	300	30000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (5)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Strike Missile (2)	F	700K	6,437,376	+1	90	U
Each missile takes 25K to destroy. Blast 15, Warm up 2						
Missile Launcher (6)	All	7K	1200	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher. 250 missiles per launcher						
Light Laser (12)	All	50K	123,597	+1	50	U

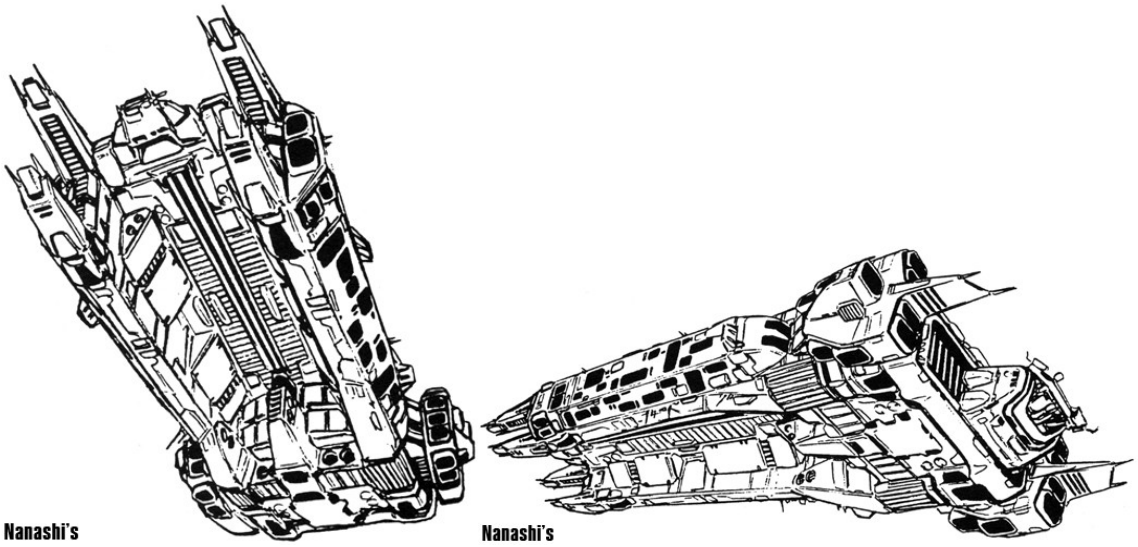
Mecha/Shuttle Compliment

QF-3000E Ghost	270
SF-3A Lancer	78

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array

Bays
Mecha: 5 bays (125 capacity)
Crew: 1 bay (2500 capacity)
Cargo: 1 bay (1250 ton capacity)
Medical Bay: none
Repair Bay: none

Multipliers
Engines MA 28 (x0.8), Hyperspace Engine (x1.0)

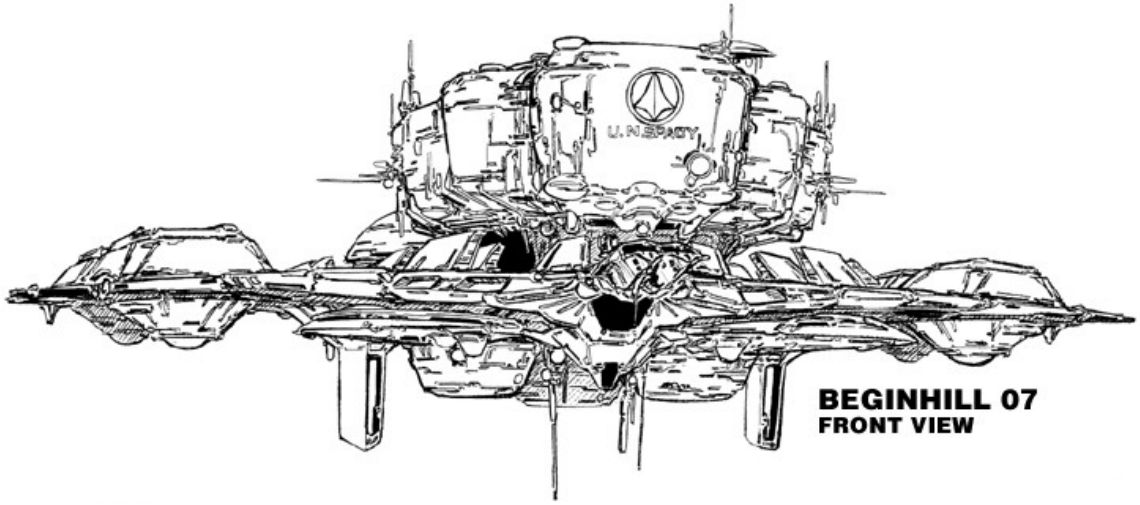


Programme: Construction of ARMD Series of space carriers begins at the L-5 manufacturing station 2003 April. ARMD-01 ARMD I commissioned 2008 July. ARMD I destroyed in the first battle of Space War I 2009 February 7.

Notes: From the production notes, there were originally plans to commission ten of these ships. However, the beginning of Space War I brought production to a halt with only two built. When the SDF-1 was overhauled in 2012, a slightly upgraded ARMD 1 & 2 were built to be permanent attachments. Also, because the QF-3000E Ghost are unmanned fighters, they require half the normal room in mecha bays.

Beginhill Macro-Training Vessel

COST: 498,765 CP
Manufacturer: OTEC Company /UN Spacy



HEIGHT: 5400m
WIDTH: ?
LENGTH: 2500m
WEIGHT: 110,150,000 tons
CREW: 50,000 total (3500 military crew, 500 civilian crew, 2000 instructors, average 40,000 trainees, 1000 military police, 3000 permanent civilian population)

Hull Class: MegaHeavy +

KILLS: 3270
ARMOR: SP 110
SPACES: 129

MA: 34 (Mach 3)
Turn: +11
Crew Grade: A (16+1d10)
Escort Vessel: Ark Royal Escort Carrier

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
None						

Mecha/Shuttle Compliment

VF-11C	60

* These are for training purposes, and are armed with paint ammo and sensor weapons. They can be outfitted for battle in less than 2 hours.

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (250,000 for 20 years) Pinpoint Barrier System (heavy), Antigravity Drive, Holographic Day/Night System, Self Destruct

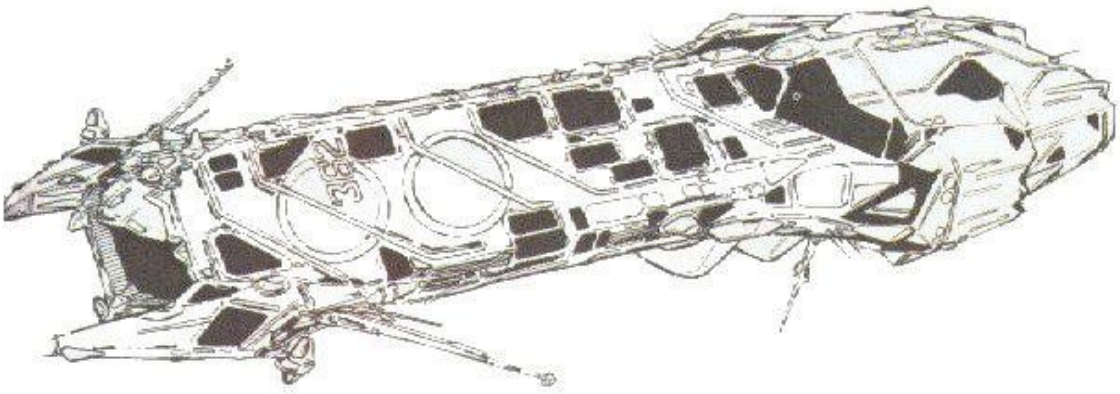
Bays
Mecha: 1 bay (120 capacity)
Crew: 5 bays (60,500 capacity)
Cargo: 5 bays (30,250 ton capacity)
Medical Bay: 1 bays (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0)

Programme: Designed as a training facility to properly train new recruits while in deep space as well as to provide instruction on new tactics to existing personnel.

Clemenceau Class Stealth Carrier

COST: 582,470 CP
Manufacturer: OTEC Company/UN Spacy



HEIGHT: ?
WIDTH: ?
LENGTH: 400m
WEIGHT: 9,500 tons
CREW: 75 officers, 741 crewmen, 140 VF pilots, 30 soldiers/security

Hull Class: Light Heavy
KILLS: 1400
ARMOR: SP 70
SPACES: 14

MA: 34 (Mach 3)
Turn: +7
Crew Grade: A (16+1d10)

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Strike Missile (2)	F	700K	6,437,376	+1	90	U
Each missile takes 25K to destroy. Blast 15, Warm up 2						
Heavy Laser Cannon (6)	F	200K	6,437,376	+1	200	U
Light Laser (10)	All	50K	123,597	+1	50	U
Missile Turret (4)	All	7K	1200	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
CIDS	All	10K	36	+1	--	U

Mecha/Shuttle Compliment

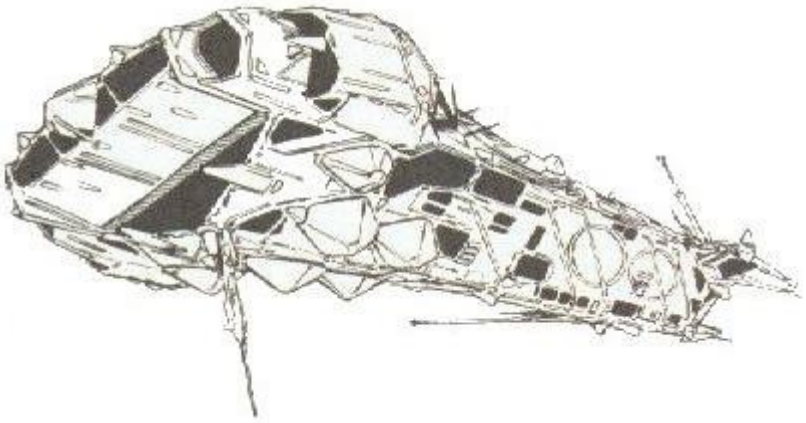
VF-11C	136
VA-14	12

*There is an additional 15 VF-11C in storage, and can be readied for use in a few hours.

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (2,000 for 30 years)
Pinpoint Barrier System (light), Self Destruct, Antigravity Drive

Bays
Mecha: 1 bays (120 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 1 bays (6050 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0), Passive Stealth (x0.2)
Weight Efficiency 5 classes (x0.5)



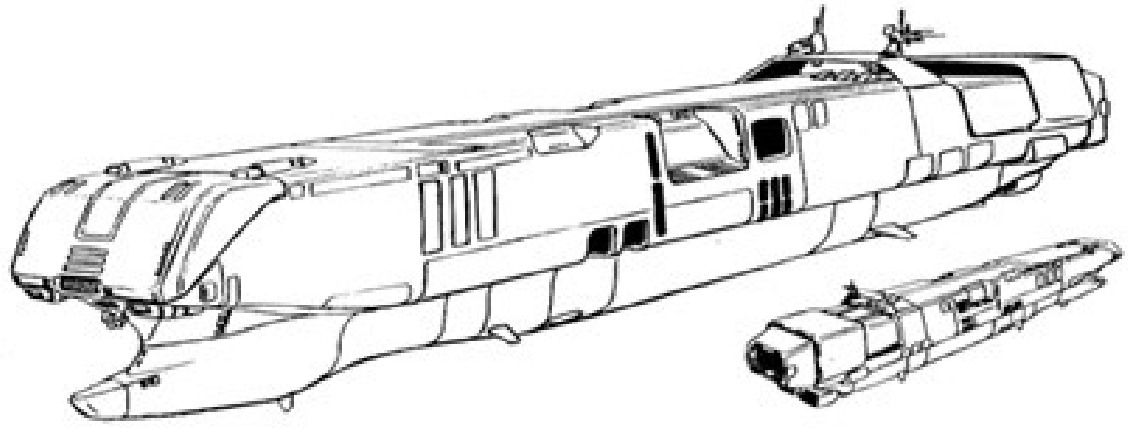
Programme: Designed as an upgrade of the dated ARMD platform.

Notable Ships of Class:

Guantanamo CV-299, launched as part of Macross 7 fleet docked with Sunnyflower
Maizuru CV/ARMD-362, launched as part of Macross 7 fleet
Mamoi CV-375, launched as part of Macross 7 fleet
Belleauwood CVR-699, Macross Frontier fleet
Clark 2 CVR-??, Macross Frontier fleet
Rakuyou CVR-670, Macross Frontier fleet
Kaga CVR-663, Macross Frontier fleet

Daedelus Class Semi-Submersible Landing Vessel

COST: 59,578 CP
Manufacturer: OTEC Company/Shinnakasu Heavy Industries/UN Spacy



HEIGHT: 130m
WIDTH: 122m

LENGTH: 488m
WEIGHT: 570,500 tons
CREW: 1,600 (28 Officers, 1,000 Crew, 572 Combat troops including Pilots)

Hull Class: Medium Heavy
KILLS: 1600
ARMOR: SP 60
SPACES: 16

MA: 5 (32 knots surface, 18 knots submerged)
Turn: +6
Crew Grade: B (14+1d10)

System	Kills	Range
SL Communications	50	3,000 km
STR Sensors	100	400 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Decuple Missile Rack (2)	All	12K	127^2	+2	15	6
Can fire volleys of 6 missiles at a time. 30 more per launcher in storage						
Multi-feed Missile (3)	All	*	*	*	20	4+4
* Sea Spray Missile: +1 WA, 20d10 Hits, Blast 50m, Range 70 km						
* Harpoon Missile: +2 WA, 30d10 Hits, AP, Long Range, Range 110 km						
20mm Vulcan Phalanx (3)	All	1K	32	+2	5	50
BV5, Anti-Missile, Ammo bin is 13K						
Torpedo Tubes (6)	All	50K	123,597	+2	30	10

Mecha/Shuttle Compliment

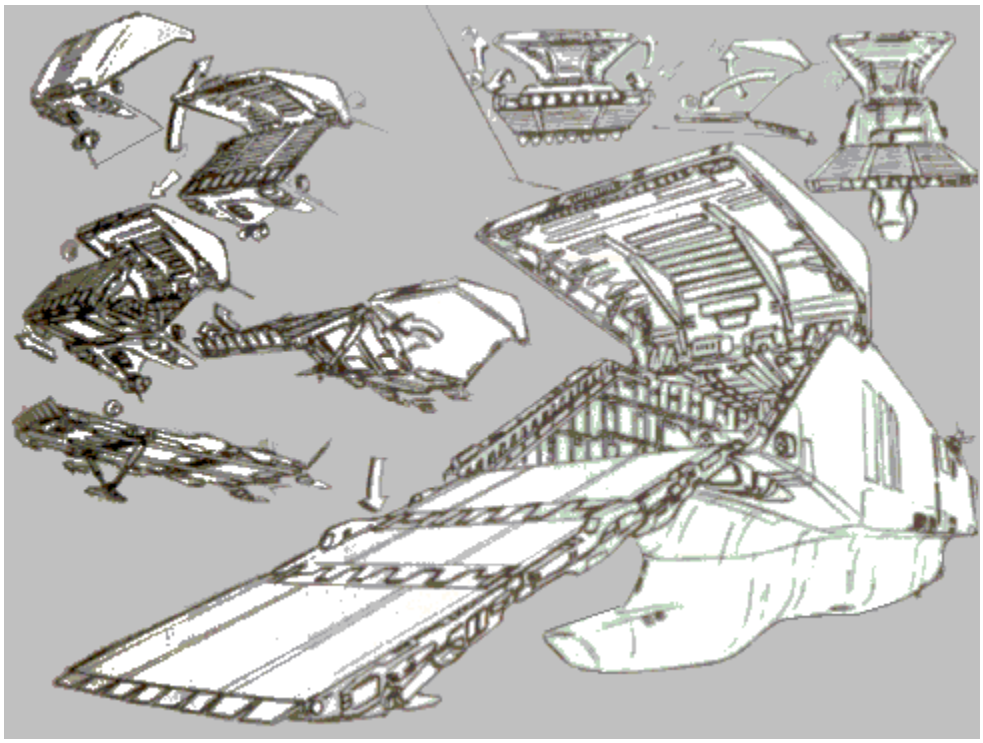
Tomahawk	32
Spartan	32
Defender	32
Phalanx	0
Monster	1
Comanchero Helicopter	8
Sea Sergeant Helicopter	8
LH-2000 Helicopter	12

* In later years, replace all VF and destroids with the current standard VF/destroid units.
* During the 2009 voyage, the Macross added 40 Defender, 20 Phalanx and 2 Monster.

Optional Systems
Self Destruct, Radio/Radar Jamming [ECM Sensor/Radar, Value 5, Radius 100]
Life Support (1500 for 1 year)

Bays
Mecha: 3 bays (195 capacity)
Crew: 1 bay (6400 capacity)
Cargo: 1 bay (3200 ton capacity)
Medical Bay: 1 bay (6400 capacity)
Repair Bay: none

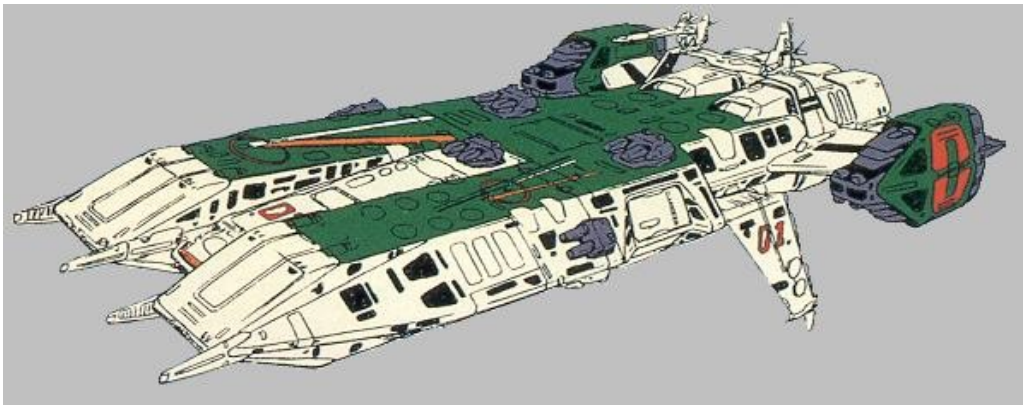
Multipliers
Engines MA 5 (-0.1), Environmentals [underwater, depth] (x0.1), Crew Quality B (x0.6)



Programme: Designed as a submergible armored transport for destroids and ground forces. The Daedelus has a mix of pre-OT and OT weaponry.

Daedelus II

COST: 400,416 CP
Manufacturer: UN Spacy Fully-Automated Armory Planet



HEIGHT: 93m
WIDTH: 149m
LENGTH: 675m
WEIGHT: 842,000 kg
CREW: 1,150 (50 Officers, 800 Crew, 300 Combat troops including Pilots)

Hull Class: Medium Heavy
KILLS: 1600
ARMOR: SP 80
SPACES: 16

MA: 28
Turn: +8
Crew Grade: B (14+1d10)

System	Kills	Range
MW Communications	200	1500 km
STR Sensors	100	400 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Medium Laser Cannon (10)	F	100K	250,000	+1	100	Unlimited
Missile Launchers (12)	All	7K	1200	+1	50	40
Light Laser Turret (30)	All	50K	123,597	+1	50	Unlimited

Mecha/Shuttle Compliment

VF-1R	48
Monster Mk II	6
Tomahawk	40
Defender	16
Phalanx	32
Spartan	32
Star Goose Shuttle	4
RC-4E Recon Shuttle	2

Optional Systems
Self Destruct, Life Support (1150 for 2 years), Radio/Radar Jamming (3 mile radius)
Pinpoint Barrier System (Medium), Subspace Mass Detector, Hyperspace Communications Relay

Bays
Mecha: 3 bays (195 capacity)
Crew: 2 bays (12,800 capacity)
Cargo: 1 bay (3200 ton capacity)
Medical Bay: 1 bay (6400 capacity)
Repair Bay: 1 bay (65 capacity)

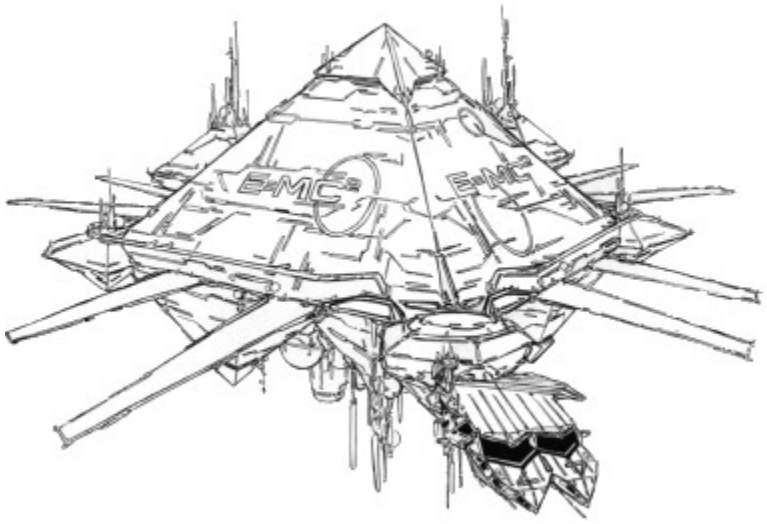
Multipliers
Engines MA 28 (x0.8), Space Fold Engine (x1.0), Crew Quality B (x0.6)

The Deadalus II with its Valkyrie Fighters as escort.

Programme: Designed as a heavily armored troop transport and ramming ship. This ship is capable of ramming into an enemy vessel (as per Daedelus Attack rules) and open both forward mecha bays.

Einstein Class Research Vessel

COST: 7,065,284 CP
Manufacturer: OTEC Company/Three Star Heavy Industries/UN Spacy



HEIGHT: 1600m
WIDTH: ?
LENGTH: 1250m
Connection Dock: 215m
WEIGHT: 5,500,000,000 tons
CREW: 27,500 total, excluding tourists (1800 military crew, 25,500 civilian crew/scientists, 200 police/civil defense)

Hull Class: MegaHeavy +
KILLS: 4947
ARMOR: SP 110
SPACES: 2769

MA: 34 (Mach 3)
Crew Grade: A (16+1d10)
Escort Vessel: Ark Royal Escort Carrier

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
None						

Mecha/Shuttle Compliment
None

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (400,000 for 30 years) Pinpoint Barrier (heavy), Antigravity Drive, Holographic Day/Night System, Self Destruct Advanced Sensors, Advanced Science Suites (+5 all scientific skill checks)

Internal Sub-compartmentalization (-3 on critical hit rolls)

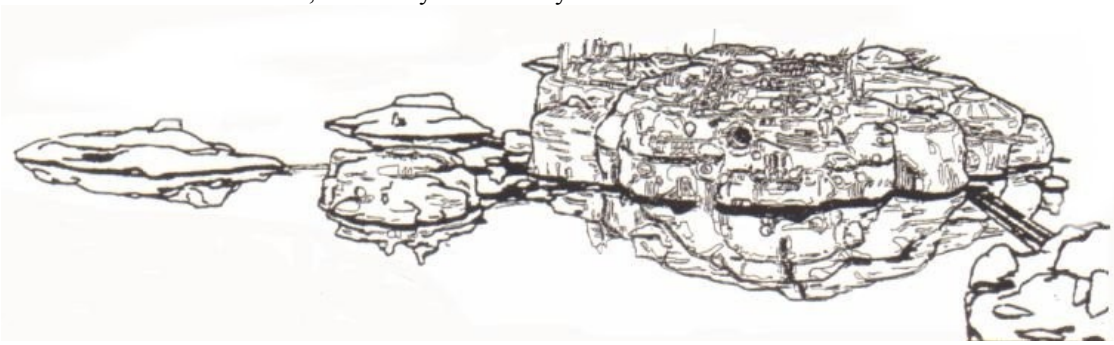
Bays
Mecha: 1 bay (120 capacity)
Crew: 40 bays (484,000 capacity)
Cargo: 50 bays (302,500 ton capacity)
Medical Bay: 5 bays (60,500 capacity)
Repair Bay: 1 bay (120 capacity)

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0), Weight Inefficient (x-0.2)

Programme: Designed for the purpose of investigating celestial and planetary phenomenon a given colony fleet may encounter. Works in tandem with the Three Star Mobile Manufacturing Platform for research and development of new technology. The Einstein is heavily compartmentalized internally, to prevent large scale catastrophes from chemical leaks or explosions.

Fully-Automated Armory Planet

COST: way too much
Manufacturer: Protoculture, refitted by UN military and OTEC



HEIGHT: 3000 km
Medium Pod: 2400 km
Small Pod: 1000 to 2000 km
WIDTH: 6000 km
Medium Pod: 2400 km
Small Pod: 1000 to 2000 km
LENGTH: 15,000 km overall
WEIGHT: ?
CREW: 750,000 civilian workers, 150,000 military

Hull Class: MegaHeavy+ (1:100 scale)
KILLS: 22,000 (main), 15,000 (medium), 10,000 (small)
ARMOR: SP 200 (all)
SPACES: 500 (main), 300 (medium), 200 (small)

MA: 34 (Mach 3)
Crew Grade: A (16+1d10)
Pods: Has 3 medium pods and 6 small pods

System	Kills	Range
SH Communications	200	3,000 km
MgH Sensors	500	8,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (10,000)	All	500K	6,437,376	+1	500	U
Warm Up 1						
Strike Missile (1,000)	All	700K	6,437,376	+1	90	U
Each missile takes 25K to destroy. Blast 15, Warm up 2						
Light Laser (5,000)	All	50K	123,597	+1	50	U
Missile Turret (5,000)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (30)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						
CIDS	All	10K	36	+1	--	U

Mecha/Shuttle Compliment

Variable Glaug	500
Queadlunn-Rau	1,000
Nousjadeul-Ger	800
Raulon-Ve	300
VF-11C	3,000
VF-17	120
VF-19	60

* These are only the units on active duty. There are hundreds of each type of current variable fighter and thousands of Glaug and Regult in storage. Assume the factory can mobilize double their numbers within a few hours notice and all of their mecha within a few days. The factory can hold up to 24,000 mecha at any given time.

Optional Systems

Subspace Mass Sensors, Hyperspace Communications Array, Life Support (millions for centuries)
Anti-Gravity System, Pinpoint Barrier System: Medium in each pod and Heavy in main pod
Cloning Facilities, Repair/Construction Bays

Bays

Mecha: 200 bays (24,000 capacity)
Crew: 100 bay (121,000 capacity)
Cargo: 100 bays (605,000 ton capacity)
Medical Bay: 10 bay (121,000 capacity)
Repair Bay: 50 bays (6000 capacity)

Multipliers

Space Fold (x1.0), Engines MA 34 (x1.1), Crew Grade A (x1.0)

2051 view

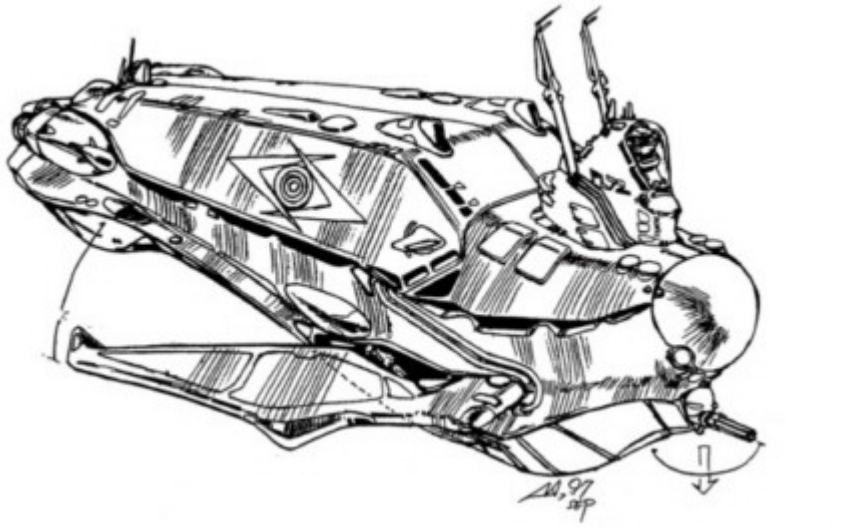
Construction/Repair Bays

The factory has hundreds of bays for building and repairing mecha and capital ships. Listed here are approximate construction times to build various mecha and ships from base components (note that these are simultaneously constructed). Each bay can produce approximately 2000 CP worth per day.

Item	Manufacture Time	Production Rate
Standard combat gear + sidearm	4 hours	200,000 per week
Standard mecha (VF-11C)	3 days	20,000 per week
Custom mecha (VF-11MAXL)	7 days	1,000 per week
Advanced mecha (VF-22)	14 days	200 per week
Small starship (Northampton)	2 months	3,000 per year
Large starship (Ark Royal)	6 months	1,000 per year
Variable starship (New Macross)	12 months	500 per year
Colony Vessel (Macross Class)	24 months	100 per year

Galaxy Patrol Ship

COST: 165,361 CP
Manufacturer: OTEC Company/UN Spacy



HEIGHT: 30.5m

WIDTH: 22.4m
LENGTH: 134m
WEIGHT: 750,000 tons
CREW: 76 total

Hull Class: Medium Heavy
KILLS: 1600
ARMOR: SP 80
SPACES: 16

MA: 28
Turn: +8
Crew Grade: A (16+1d10)

System	Kills	Range
SL Communications	200	3,000km
AH Sensors	300	3,000 km

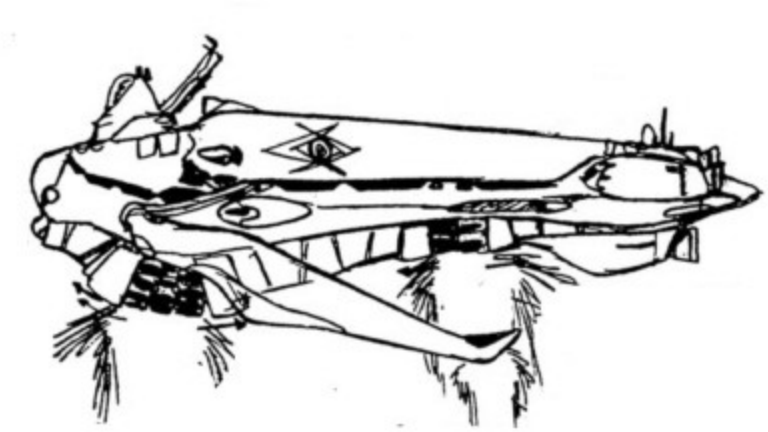
Weapon	Arc	DMG	Range	WA	Kills	Payload
Rail Cannon (1)	R	40K	3,200,000	+1	40	100
AP, BV3						
Medium Laser Cannon (2)	F	100K	250,000	+1	100	U
Missile Turret (2)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
CIDS	All	5K	24	+1	--	U

Mecha/Shuttle Compliment
None

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (100 for 20 years)
Pinpoint Barrier System (medium), Antigravity Drive

Bays
Mecha: none
Crew: 1 bay (12,100 capacity)
Cargo: 1 bays (6050 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: none

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0)



Programme: Designed for the purpose of short-range patrol near colonies and along primary trade routes.

Haruna Class Stealth Cruiser

COST: 984,425 CP
Manufacturer: OTEC Company/UN Spacy

HEIGHT: ?
WIDTH: ?
LENGTH: 350m
WEIGHT: 175,000 tons
CREW: 434 total (18 officers, 350 crew, 36 VF pilots, 30 soldiers)

Hull Class: Heavy Striker
KILLS: 1000
ARMOR: SP 60
SPACES: 10

MA: 34 (Mach 3)
Turn: +5
Crew Grade: A (16+1d10)

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (3)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Strike Missile (4)	F	700K	6,437,376	+1	90	6
Each missile takes 25K to destroy. Blast 15, Warm up 2						
Light Laser (16)	All	50K	123,597	+1	50	U
CIDS	All	10K	36	+1	--	U

Mecha/Shuttle Compliment

VF-4	36

*Replace the mecha with the appropriate VF of the time.

Optional Systems

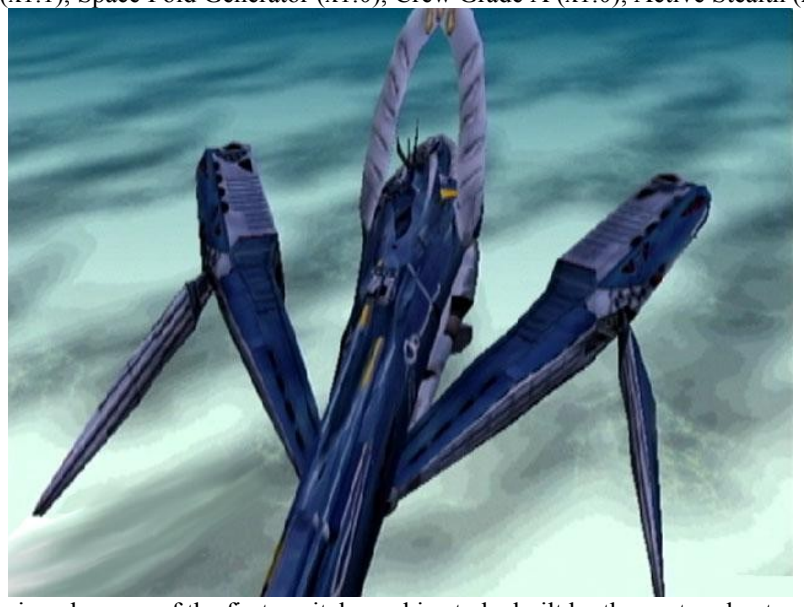
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (600 for 30 years)
Pinpoint Barrier System (medium), Self Destruct, Antigravity Drive

Bays

Mecha: 1 bays (120 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 1 bays (6050 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

Multipliers

Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0), Active Stealth (x1.3)



Programme: Designed as one of the first capital warships to be built by the captured automated armory satellite as a merging of human and Zentraedi technology.

Notes: The design of the VF rail launchers only allows it to launch 3 variable fighters per side per round.

Notable Ships of Class:

Algenicus: Command Ship of the Dancing Skulls Special Forces Squadron commanded by Max and Miriya Jenius)
Red Moon: Commanded by Max Jenius and the birthplace of Mylene Jenius

Heaven Class Cemetery Ship

COST: 192,355 CP
Manufacturer: OTEC Company/Three Star Heavy Industries/UN Spacy

HEIGHT: ?
WIDTH: ?
LENGTH: ?
WEIGHT: 21,000,000 tons [unofficial estimate]
CREW: 7300 total, excluding tourists (1000 military crew, 3000 civilian crew, 300 police/civil defense, 3000 permanent civilian population)

Hull Class: MegaHeavy+
KILLS: 2380
ARMOR: SP 90
SPACES: 40

MA: 34 (Mach 3)
Turn: +11
Crew Grade: A (16+1d10)
Escort Vessel: Northampton Stealth Frigate

System	Kills	Range
MW Communications	200	1500 km
STR Sensors	100	100 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
None						

Mecha/Shuttle Compliment
None.

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (50,000 for 30 years) Pinpoint Barrier (Medium), Antigravity Drive, Holographic Day/Night System, Self Destruct

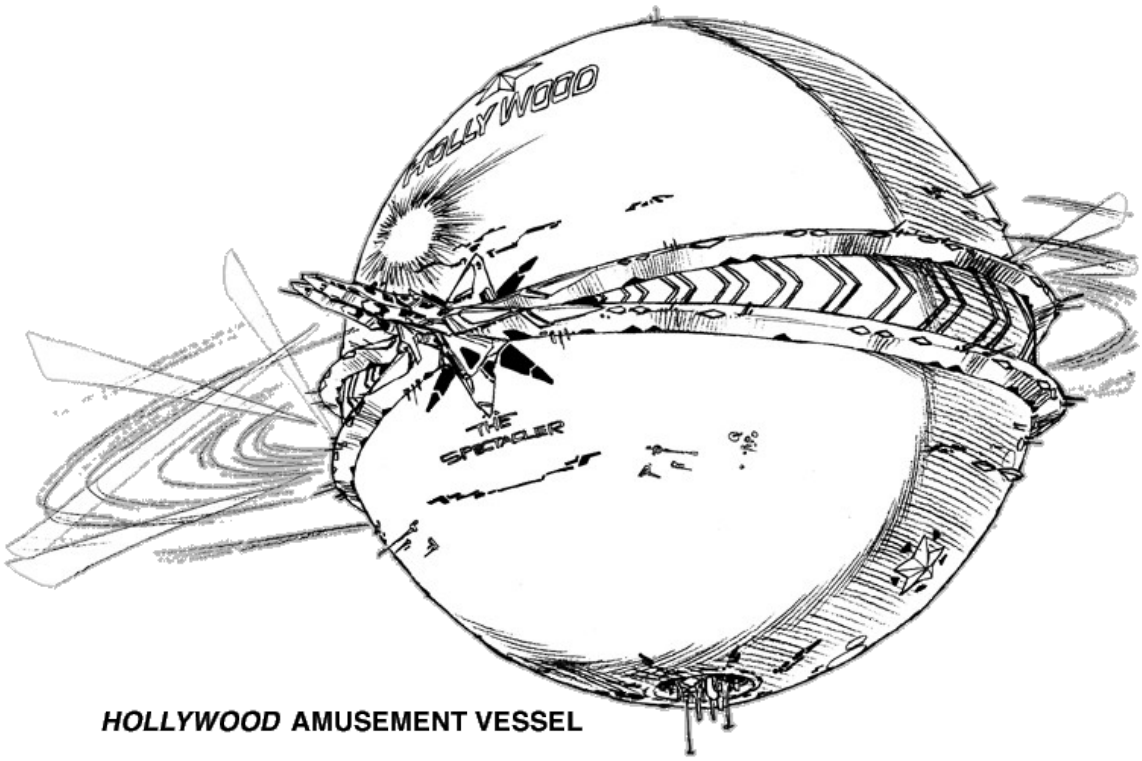
Bays
Mecha: 1 bay (120 capacity)
Crew: 1 bay (12,100 capacity) + 15 bays for cemetery plots (181,500 capacity)
Cargo: 3 bays (18,150 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: none

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0)

Programme: Designed for the purpose of traditional burial for those on a colony fleet who wish such services. There is little information about this ship, so all stats have been approximated.

Hollywood Class Amusement Ship

COST: 748,660 CP
Manufacturer: OTEC Company/Three Star Heavy Industries/UN Spacy



***HOLLYWOOD* AMUSEMENT VESSEL**

HEIGHT: 1800m
WIDTH: ?
LENGTH: 1650m
Connection Dock: 60m
WEIGHT: 177,000,000 tons
CREW: 212,500 total, excluding tourists (1500 military crew, 8000 civilian crew, 3000 police/civil defense, 200,000 permanent civilian population); can accommodate a maximum of 100,000 tourists

Hull Class: MegaHeavy +
KILLS: 3940
ARMOR: SP 110
SPACES: 196

MA: 34 (Mach 3)

Turn: +11
Crew Grade: A (16+1d10)
Escort Vessel: Ark Royal Escort Carrier

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

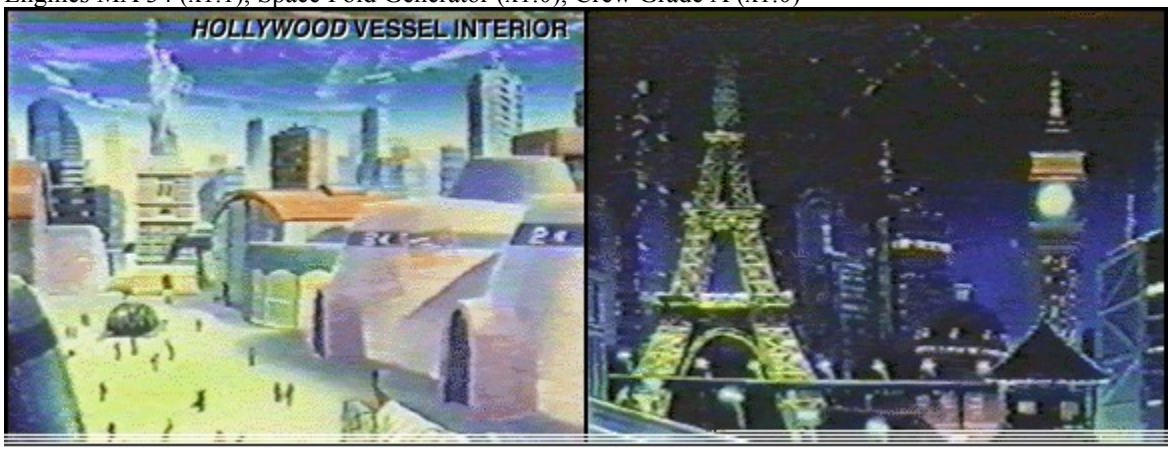
Weapon	Arc	DMG	Range	WA	Kills	Payload
None						

Mecha/Shuttle Compliment
None.

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (400,000 for 30 years)
Pinpoint Barrier (heavy), Antigravity Drive, Holographic Day/Night System
Entertainment & Recording Suites

Bays
Mecha: 1 bay (120 capacity)
Crew: 30 bays (363,000 capacity)
Cargo: 50 bays (302,500 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0)



Programme: Designed to provide entertainment to long-range colony fleets with replicas of famous landmarks from before Space War I as well as all manner of electronic entertainment. It also serves a role in auxiliary communications for UN forces through their Galaxy Network connections.

Macross Quarter

COST: ??
Manufacturer: Yaesu Heavy Industries / L.A.I. Corporation

HEIGHT: 96m (cruiser), 316m (storm attacker)
WIDTH: 178 (cruiser), 164m (storm attacker)
LENGTH: 472m (cruiser), 79.2m (storm attacker)
ARMD-L Carrier: 254m length
ARMD-R Gunship: 227m length
Blaster-L/R: 129m length
WEIGHT: 165,000 tons operational; 265,000 tons overall
Main Body: 152,000 tons
ARMD-L Carrier: 56,000 tons
ARMD-R Gunship: 48,000 tons
Blaster-L/R: 8,855 tons
CREW: ?

KILLS:
Main Body:
ARMD-L Carrier:
ARMD-R Gunship:
Blaster-L/R:
ARMOR: SP 100, Beta Class (DC 40)
SPACES: ?

MA: ?
Turn: ?
Crew Grade: A (16+1d10)

System	Kills	Range
SL Communications	200	3,000km
AH Sensors (excessive)	700	30,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Gunship	F					
* Functions as both a gatling-type buster cannon and a heavy quantum reaction cannon						
Heavy Laser (x12)	A					
2 on torso, 2 each shoulder, 2 on rear torso, 1 each upper leg, 1 each lower leg						

Mecha/Shuttle Compliment

VF-25	x??
VB-6	x1
Cheyenne II	x??

* Maximum of 80 mecha

Optional Systems

Subspace Mass Sensors, Hyperspace Communications Array, Life Support (?)
Pinpoint Barrier System (medium), Omindirectional Barrier System, Antigravity Drive

Bays

Mecha: 1 bays (80 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 1 bays (6050 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

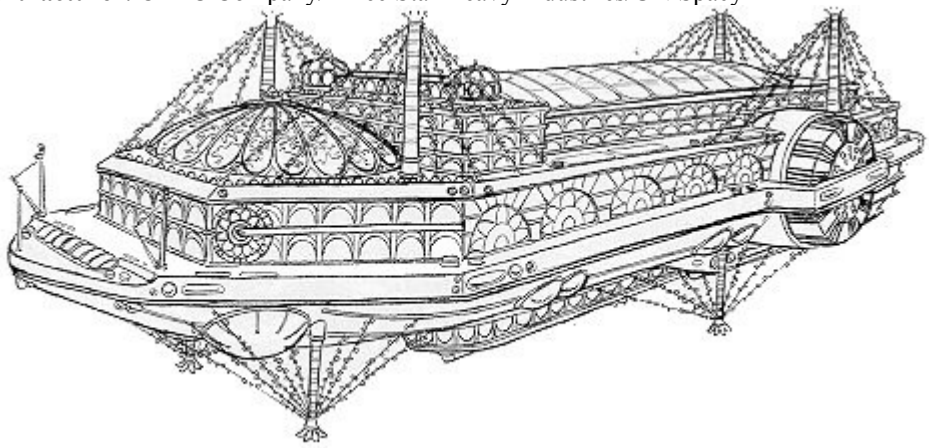
Multipliers

Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0)

Programme: The *Macross Quarter* is a compound vessel consisting of five warships. The central hull consists of the main body and legs. The forward port side aircraft carrier is designated ARMD-L while the starboard side gunship is designated ARMD-R. The rear starboard-side mobile battery warship is BASTER-R and the rear port side mobile battery warship is BASTER-L. These design mechanisms were aimed at simplifying the transformation. Since each unit carries its own reaction engine and fold engine they can be deployed as independent warships or a fleet. The *Macross Quarter* has the capabilities of an aircraft carrier/amphibious assault ship, close-quarter combat capabilities through transformation to storm attack mode and can carry a maximum of 80 variable fighters and Destroids. The gatling-type buster cannon - which can be used as a heavy quantum reaction gun - is suitable for heavy anti-ship combat. In addition to a high output reaction engine cluster, the Macross Quarter has the overall performance worthy of the "Macross" name despite being within the small, 400m-class of carriers.

Mark Twain Class "Riverboat" Resort Ship

COST: 50,530 CP
Manufacturer: OTEC Company/Three Star Heavy Industries/UN Spacy



HEIGHT: ?
WIDTH: ?
LENGTH: 300m
WEIGHT: ? tons
CREW: 100 crew, 50 police/security, 1100 passengers

Hull Class: Heavy Striker
KILLS: 1000
ARMOR: SP 60
SPACES: 10

MA: 34 (Mach 3)
Turn: +5
Crew Grade: A (16+1d10)

System	Kills	Range
MW Communications	200	1500 km
STR Sensors	100	100 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
None						

Mecha/Shuttle Compliment
None.

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (1500 for 30 years)
Pinpoint Barrier: Medium, Anti-Gravity System, Holographic Day/Night System

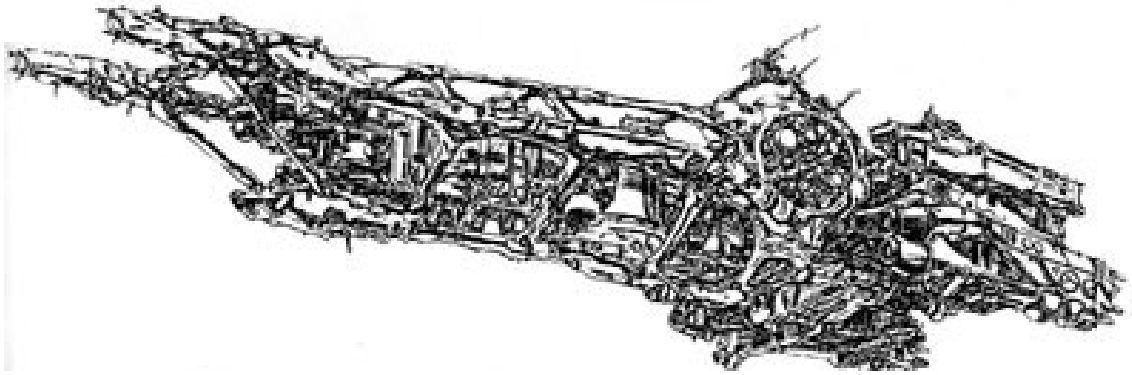
Bays
Mecha: 1 bay (25 capacity)
Crew: 1 bay (2500 capacity)
Cargo: 2 bays (2500 ton capacity)
Medical Bay: 1 bays (2500 capacity)
Repair Bay: none

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0)

Programme: Designed for adult entertainment during long voyages; provides many forms of gambling, risqué shows and a suite of high class hotels.

Megaroad Class Colonial Vessel

COST: 752,611 CP
Manufacturer: OTEC Corporation



HEIGHT: ?
WIDTH: ?
LENGTH: 5200m [1770m]
WEIGHT: 18,000,000 tons [30,300,000 tons]
CREW: 8,000 personnel and 80,000 colonists/civilians

Hull Class: MegaHeavy +
KILLS: 2350
ARMOR: SP 100
SPACES: 37

MA: 28
Turn: +11
Crew Quality: B (14+1d10)

System	Kills	Range
MW Communications	200	1500 km
MW Sensors	200	1500 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (2)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Light Laser (150)	All	50K	123,597	+1	50	U
Missile Turret (12)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
CIDS	All	5K	24	+1	--	U

Mecha/Shuttle Compliment

VF-4G	480
VF-14	48
Shuttle	64

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Self Destruct, Hydroponic Food Gardens Pinpoint Barrier System (Medium), Antigravity Drive

Bays
Mecha: 5 bays (600 capacity)
Crew: 8 bays (96,800 capacity)
Cargo: 10 bays (60,500 ton capacity)
Medical Bay: 2 bays (24,200 capacity)
Repair Bay: 2 bays (240 capacity)

Multipliers
Engines MA 28 (x0.8), Hyperspace Engine (x1.0), Crew Grade B (x0.6)

Programme: Construction of second Macross class ship begins at the Lunar surface's Apollo Base 2003 November. Construction resumes as a colonization ship after Space War I on half-constructed and renamed SDF-2 Megaroad-01 2010 June. Megaroad-01 launches as part of the first long-distance colonization fleet and construction of mass-produced super-long-distance colonization ships Megaroad-02 and -03 based on the Megaroad 2012 September. Hereafter, one or two super-long-distance colonization ships are constructed yearly. Launches of the second and third super-long-distance colonization fleet (Megaroad-02 and -03 ships) 2014. Hereafter, super-long-distance colonization fleets are routinely launched. The Megaroad is discontinued in the late 2020's.

Ships of Renown

Megaroad 1 – Launched in 2012, lost near the galactic core in 2016*. Lost with the ship are Misa, Hikaru and Miku Ichijyo and Lynn Minmei.

Megaroad 2 – Laid down in September 2012, launched in 2014.

Megaroad 3 – Laid down in September 2012, launched in 2014.

Megaroad 4 – Colonizes Eden

Megaroad 13 – Laid down in Jun 2013. Lost in the Varauta System to the Protodeviln.

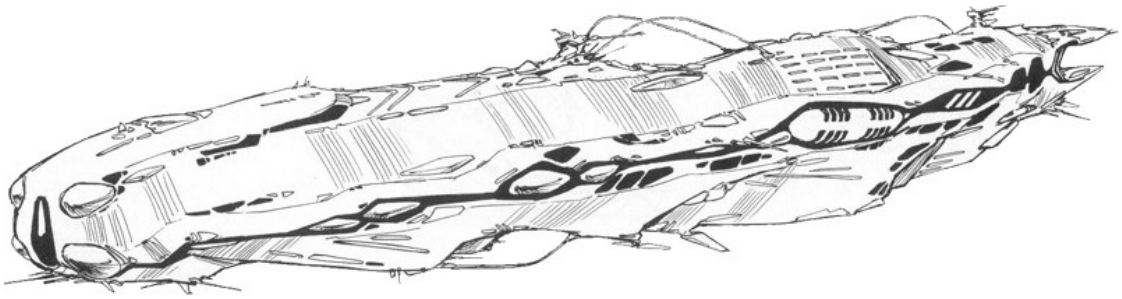
Megaroad 24 – Destroyed in construction.

Megaroad 25 – Destroyed in construction.

* The opening animation of Macross Frontier shows the Megaroad 01 going nowhere *near* the galactic core.

Neo Nupetiet Vergnitzs-bis

COST: 4,645,415 CP
Manufacturer: Worquli-Quatafilla/OTEC Company/UN Spacy



HEIGHT: ?
WIDTH: ?
LENGTH: 5730m
WEIGHT: 180,000,000 tons
CREW: 8979 total (125 officers, 3000 crew, 684 VF pilots, 150 reserve VF pilots, 4020 Zentraedi pilots, 1000 soldiers)

Hull Class: MegaHeavy +
KILLS: 3195
ARMOR: SP 110
SPACES: 199 + 155

MA: 34
Turn: +11
Crew: Grade A (16 + 1d10)

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Heavy Particle Cannon	FF	5000K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 5						
Superheavy Laser (20)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Particle Beam (60)	S	50K	123,597	+1	50	U
Light Laser (60)	S	50K	123,597	+1	50	U
Missile Turret (100)	All	12K	127^2	+1	50	36
Long Range, Blast 2, Fires volleys of up to 6 per launcher						
Torpedo Tube (60)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						
CIDS	All	10K	36	+1	-	U

Mecha/Shuttle Compliment

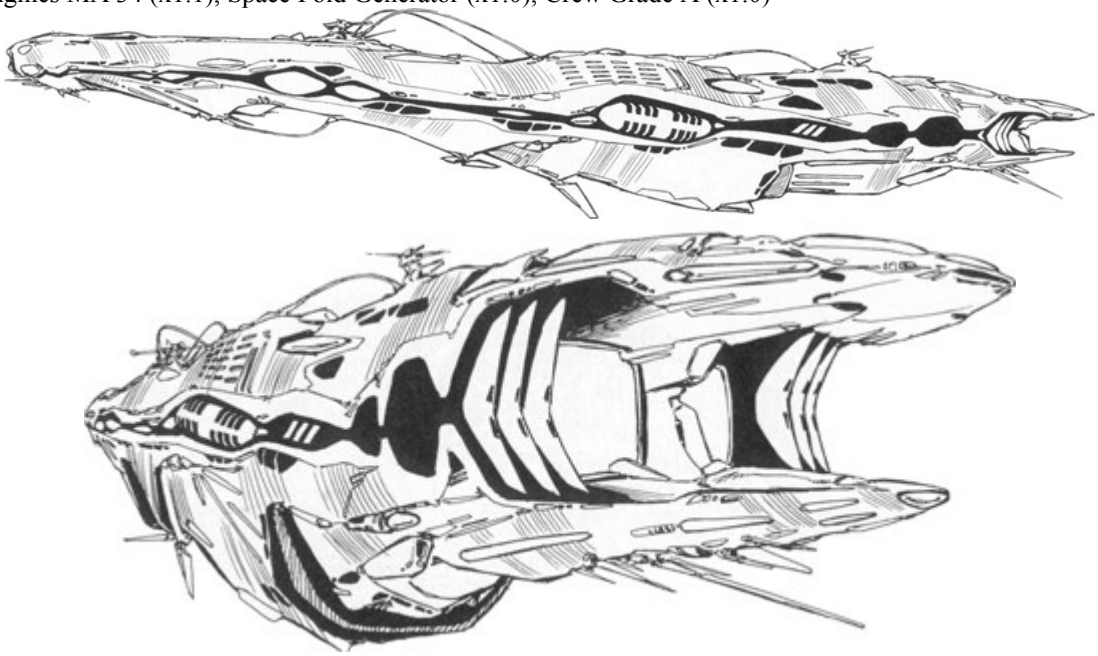
VF-11C	600
VA-3 or VA-14	60
VF-19	24
Neo Regult	3000
Neo Glaug	50
Neo Glaug Armored Sled	20
Neo Raulon-Ve	200
Neo Nousjadeul-Ger	300
Queadlunn-Rau	450
Quel-Quallie	6
Recovery Pods	4
Reentry Pods	12

Shuttlecraft 6

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (10,000 for 20 years)
Pinpoint Barrier System (heavy), Antigravity Drive

Bays
Mecha: 227 (27,240 capacity)
Crew: 4 (48,400 capacity)
Cargo: 10 (60,500 ton capacity)
Medical Bay: 1 (12,100 capacity)
Repair Bay: 2 (240 capacity)

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0)



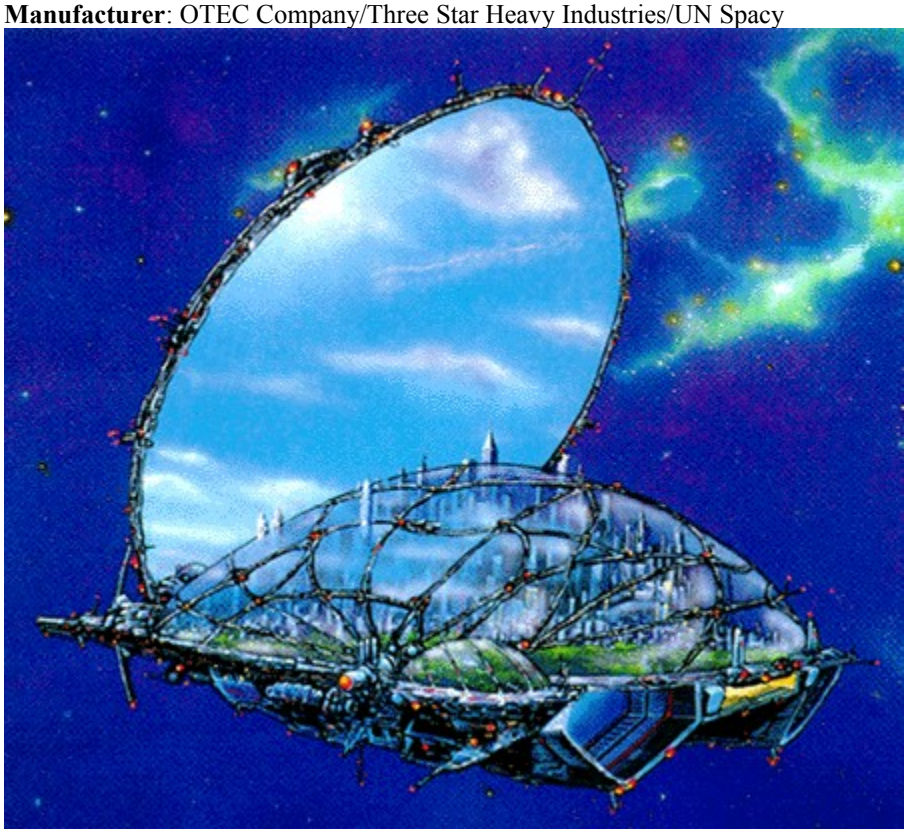
Programme: The Neo Nupetiet Vergnitzs-bis Class Battleship is the largest ship in the UN Spacy Fleet at over 5.7 km long it dwarves even the New Macross Class Carriers. Originally Zentraedi Nupetiet Vergnitzs-bis Class Battleships, only a handful of these behemoths exist as the majority were destroyed in the battle against Boddole Zer. Those that remained after the conflict where inducted into the UN Spacy Fleet and underwent refitting to accommodate micronians into their crews.

Vrlitwhai Kridonak's Flagship was the first of the battleships to undergo refitting and introduction and became the first ship of the new UN Spacy Fleet. Several of this class of ship left with the Megaroad-01, as have others with other Fleets. One such ship accompanied the ill fated Macross-05 Fleet and was destroyed on the ground by the Varauta.

Notes: The stats I found list this as 1,800,000 tons (approximately 1% of the weight of the original). Even with the better technology of the New Unity Government and OTEC, I doubt they could sheer that much mass off (not to mention it leaves no room for the required bays and systems). I am assuming this mass to be a typo.

New Macross Class Colony Ship

COST: 21,359,340 CP
Manufacturer: OTEC Company/Three Star Heavy Industries/UN Spacy



HEIGHT: ?
WIDTH: 220m
LENGTH: 58,000m total
Docking Section: 800m
WEIGHT: 7,777,770,000 tons
CREW: 10,500 crew and soldiers, 350,000 colonists

Hull Class: MegaHeavy +
KILLS: 59,940
ARMOR: SP 110
SPACES: 7796
Projectile Shield: 20,000 Kills with SP 110 Beta armor (DC 40)

MA: 22 (Mach 1)
Crew Grade: A (16+1d10)
Escort Vessel: New Macross Variable Carrier

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
None						

Mecha/Shuttle Compliment

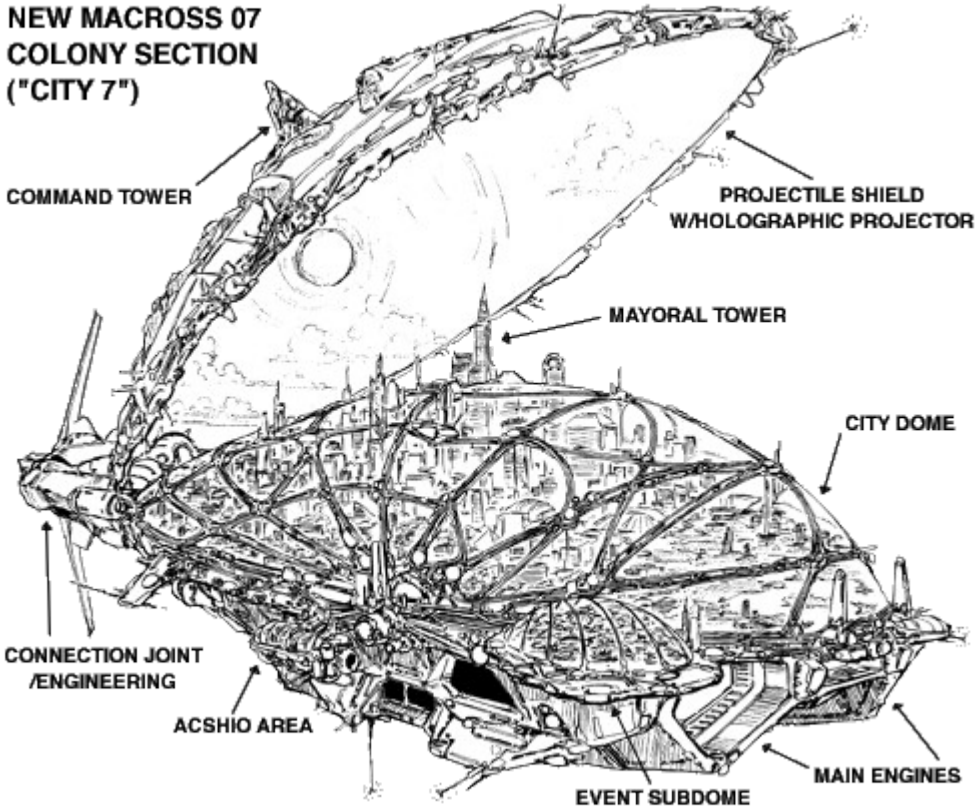
Variable Air Mecha	30

Variable Space Mecha 30
Variable Ground Mecha 60

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (400,000 for 30 years) Pinpoint Barrier (heavy), Antigravity Drive, Expansion Docking Ports (6), Self Destruct Holographic Day/Night System

Bays
Mecha: 1 bay (120 capacity)
Crew: 40 bays (484,000 capacity)
Cargo: 50 bays (302,500 ton capacity)
Medical Bay: 5 bays (60,500 capacity)
Repair Bay: 1 bay (120 capacity)

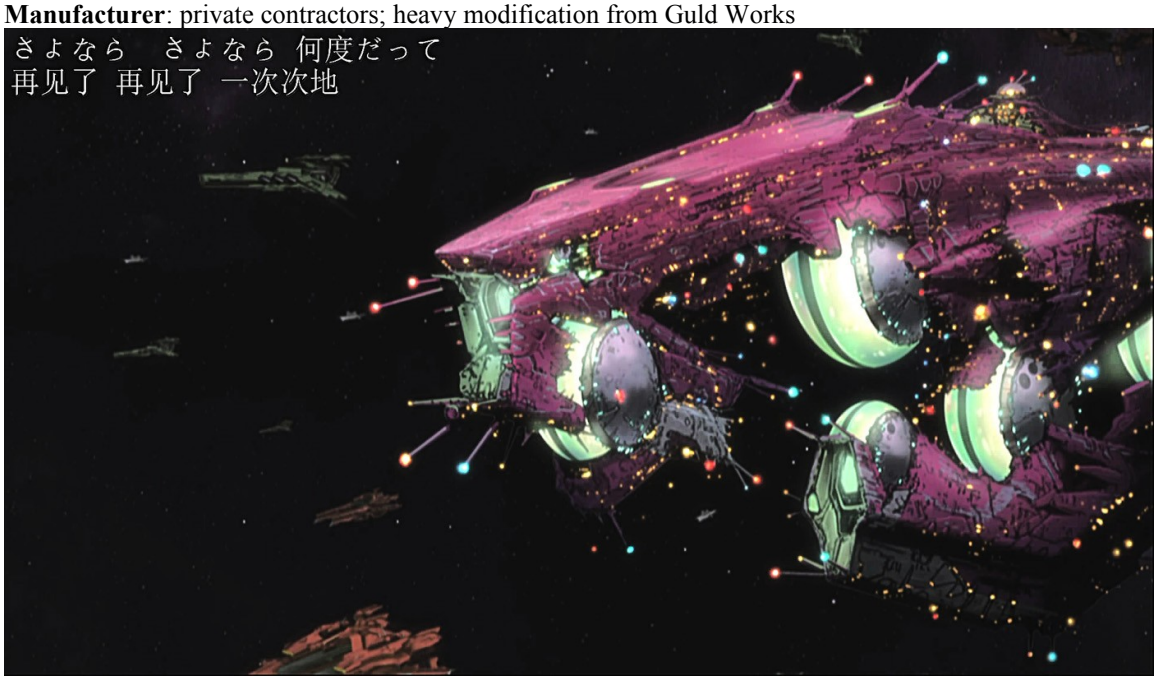
Multipliers
Engines MA 22 (x0.6), Space Fold Generator (x1.0), Crew Grade A (x1.0)



Programme: Designed as the new generation long-range colony ship, replacing the Megaroad class ships in 2030. Features interior climate control, artificial day/night cycle, parks and a full range of urban lifestyle. The New Macross colonies can have up to 6 external domes connected to them which provide additional space for people and supplies. The disadvantage of these domes is that they are not protected by the city's projectile shield, even when the shield is fully closed. Most of the time these domes are used for parks and/or agriculture, though they are sometimes used to hold extra settlers. Such external habitats usually become run-down quickly as they are not patrolled and maintained as frequently as the internal city is. The Acshio section of City 7 is an example of such a module.

New Macross Class Colony Ship [4th Generation]

COST: 21,359,340 CP
Manufacturer: private contractors; heavy modification from Guld Works



HEIGHT: ?
WIDTH: 220m
LENGTH: 58,000m total
Docking Section: 800m
WEIGHT: 7,777,770,000 tons
CREW: 10,500 crew and soldiers, 350,000 colonists

Hull Class: MegaHeavy +
KILLS: 59,940
ARMOR: SP 110
SPACES: 7796

MA: 22 (Mach 1)
Crew Grade: A (16+1d10)
Escort Vessel: New Macross Variable Carrier [Battle Galaxy]

System	Kills	Range
SL Communications	200	3,000km
AH Sensors (excessive)	700	300,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
None						

Mecha/Shuttle Compliment

VF-27	30
AIF-9V Ghost	100

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (400,000 for 30 years) Pinpoint Barrier (heavy), Antigravity Drive, Expansion Docking Ports (6), Self Destruct Holographic Day/Night System

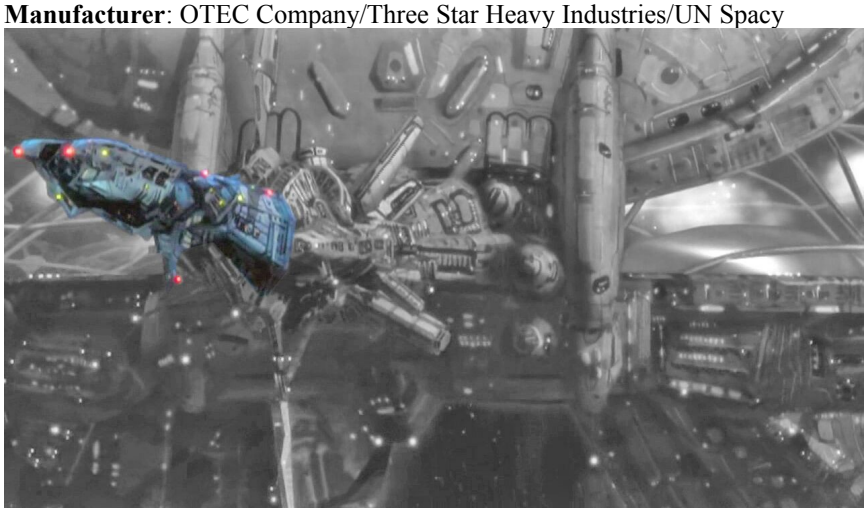
Bays
Mecha: 2 bays (240 capacity)
Crew: 40 bays (484,000 capacity)
Cargo: 50 bays (302,500 ton capacity)
Medical Bay: 5 bays (60,500 capacity)
Repair Bay: 1 bay (120 capacity)

Multipliers
Engines MA 22 (x0.6), Space Fold Generator (x1.0), Crew Grade A (x1.0)

Programme: Macross Galaxy colonization fleet is the 9th Large-scale emigration fleet, the 51st Super-Long-Distance colonization fleet and the 21st New Macross Class Emigration Fleet, which departed from the planet Eden sometime in 2031 (approximately 10 years before the Macross Frontier fleet departed in 2041). The Macross Galaxy was planned and supported by large corporations and the many new technologies designed onboard the fleet continually evolve as the fleet travels through space. Chief among these evolving technologies was the pursuit of cybernetics and cybernetic implants in living beings. The Battle-class space stealth aircraft carrier *Battle 21/Battle Galaxy* is the offensive unit attached to the flagship of 21st New Macross class immigration fleet, Macross Galaxy. Although it was initially presumed to have been destroyed by the Vajra in the early stages of conflict in 2059, it was later discovered that Grace O'Connor had hidden the vessel. The Battle Galaxy is similar in structure to Battle Frontier but both the internals and electronic equipment are different. Unlike its sister fleet, Macross Frontier, it uses chemical plants and does not have Zentraedi residents. One of its most prominent citizens is the idol singer Sheryl Nome. The fleet allows its citizens to attach cybernetic units and implants to their bodies. While en route towards the center of the galaxy, this fleet sustained a large-scale attack by the Vajra. The Macross Galaxy featured many escorts of which two were warships named the *Kaitos* (destroyed by the Vajra) and the carrier *Dulfim*. Unlike the Macross class colony ship, the Galaxy does not appear to have the same "clamshell" design and may or may not feature internal holographic day/night displays. Galaxy was designed and built by private corporations and has a design not seen before or after its construction.

New Macross Class Colony Ship [5th Generation]

COST: 31,263,130 CP (57,468 CP per Island)
Manufacturer: OTEC Company/Three Star Heavy Industries/UN Spacy



Battle 25 highlighted

HEIGHT: 2000m
WIDTH: 550m [?]
Islands: 3,000m diameter
LENGTH: 15,000m total
Docking Section: ?m
Islands: 8,000m

WEIGHT: 16,550,000,000 tons
CREW: 10,500 crew and soldiers, 5,000,000 colonists and another 5,000,000 colonists on the island chains

Hull Class: MegaHeavy +
KILLS: 167,670
4500 for Islands
ARMOR: SP 110
SP 100 for Islands
SPACES: 16,479
500 for Islands
Projectile Shield: 160,000 Kills with SP 110 Beta armor (DC 400)
1000 Kills with SP 100 Beta armor for Islands

MA: 22 (Mach 1)
Crew Grade: A (16+1d10)
Escort Vessel: New Macross Variable Carrier

System	Kills	Range
MS Communications	100	10,000km
AH Sensors (excessive)	700	300,000 km

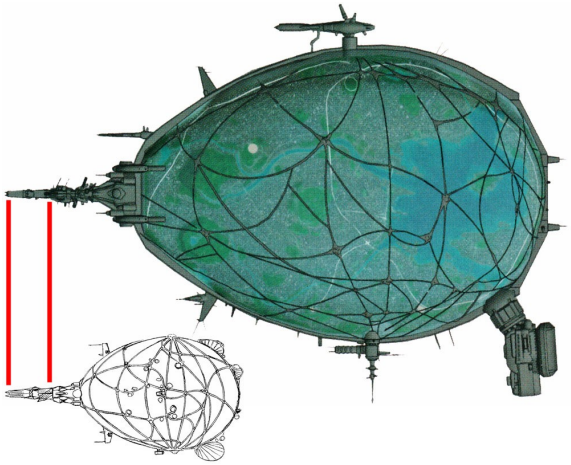
Weapon	Arc	DMG	Range	WA	Kills	Payload
None						

Mecha/Shuttle Compliment
?

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (7,000,000 for 50 years)
Omnidirectional Barrier, Antigravity Drive, Expansion Docking Ports (6), Self Destruct
Holographic Day/Night System, Advanced Biosphere

Bays
Mecha: 1 bay (120 capacity)
Crew: 420 bays (5,082,000 capacity)
Cargo: 300 bays (1,815,000 ton capacity)
Medical Bay: 5 bays (60,500 capacity)
Repair Bay: 1 bay (120 capacity)

Multipliers
Engines MA 22 (x0.6), Space Fold Generator (x1.0), Crew Grade A (x1.0)



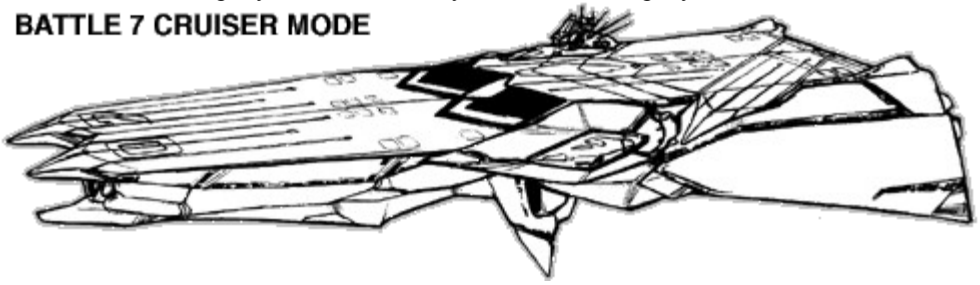
size comparison: Macross F vs. Macross 7

Programme: The enormous Macross Frontier colony fleet consists of the Battle 25 attached to the front of the massive Island 1 some 15 kilometers long (much larger than City 7, which was some 6 kilometers in length). Nearly half of the 10 million residents of the Macross Frontier fleet reside in Island 1 under a dome some 2,000 meters in altitude. The ground levels feature metro areas, hills, rivers, and oceans. Sky city is located on the ceiling of the dome while there are several levels underground with residential zones and storage space, gravity generators, propulsion systems, and so on. The shell remains up normally but is closed during battles and space folds. A large cluster of other, smaller domed Islands are also attached directly to the Macross Frontier in two large chains trailing behind the Island 1. Island 3 is noted to contain an agricultural area, the Zentraedi mall Formo and an alien lifeform laboratory. In times of crisis, the individual Islands have defensive shutters that envelope the dome to protect those inside. The city is designed to be a meshing of San Francisco and Shibuya.

Notes: The only weight listing I have found was 16,550,000 which puts it weighing *less* than the Macross 7. I adjusted the weight up to 16,550,000,000.

New Macross Class Super-Dimensional Carrier

COST: 1,439,460 CP
Manufacturer: OTEC Company/Three Star Heavy Industries/UN Spacy



HEIGHT: 1710m in storm attacker mode
WIDTH: ?
LENGTH: 1510m in cruiser mode
WEIGHT: 7,700,00 tons
CREW: 104 officers, 2165 crewmen, 450 VF pilots, 60 soldiers/security

Hull Class: MegaHeavy+
KILLS: 2200 (500 for gunship)
ARMOR: SP 110, Alpha Class (SP 80 for gunship)
SPACES: 25 + 80

Storm Attacker Mode
Torso: 600K
Arms: 300K each, plus a 200K "shield" of Beta Class armor (SP 110, DC 40, DV-0)
Legs: 500K each

MA: 34 (Mach 3)
Turn: +11
Crew Grade: A (16+1d10)

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Heavy Particle Cannon	FF	5000K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 5						
Rail Cannon (4)	All	120K	6,437,376	+1	120	U
AP						
Strike Missile (8)	F	700K	6,437,376	+1	90	U
Each missile takes 25K to destroy. Blast 15, Warm up 2						
Light Laser (30)	All	50K	123,597	+1	50	U
Missile Turret (12)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
CIDS	All	10K	36	+1	--	U

Mecha/Shuttle Compliment

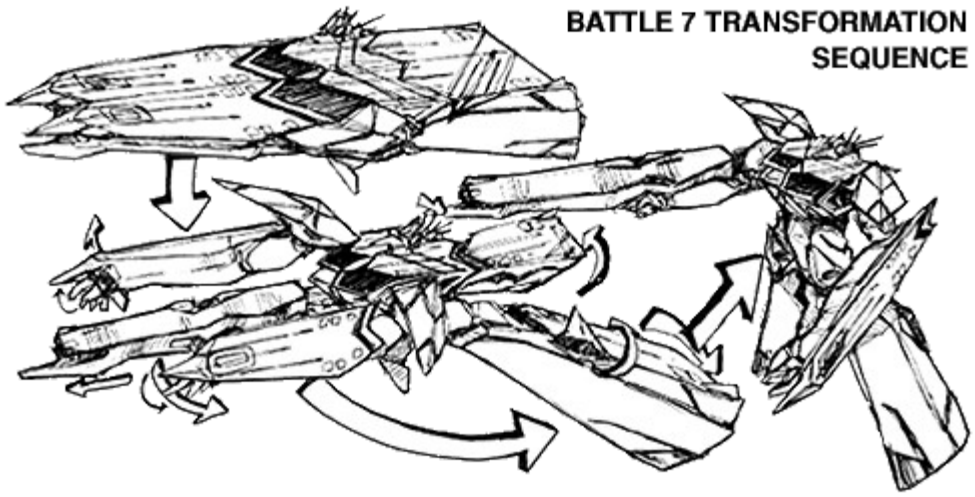
VF-11C	336
VF-11C Full Armor	24
VF-14 or VA-14	24
VF-17	3
VF-19	3
SB-10 Starwing	10
Heavy VTOL	6
Multi-purpose VTOL	12
Shuttles	12
Conserax Probe	30

* This ship has an additional 60 VF-11C and 3 VF-17 in storage, and can be readied in a few hours notice.

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (2,000 for 30 years)
Pinpoint Barrier System (heavy), Hypervelocity Launcher, Antigravity Drive

Bays
Mecha: 4 bays (480 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 2 bays (12,100 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0), Transformable (x0.4)



Programme: Designed primarily as an escort and command for the Macross Class colony ship. A few of these vessels have been used as flagships for galaxy patrol fleets.

Notes: In carrier mode, the flight decks are the arm shields, and are covered in Beta class armor (DC 40). Next Age variation starts with the 12th Macross Colonial Fleet [?], and is largely cosmetic in nature.

Notable Ships of Class:

New Macross 05 (launched 2036, destroyed 2045 by Varauta forces)
*New Macross 07** (launched 2038, battle section destroyed 2046 by Protodeviln Gepernich)
New Macross13 (Next Age Carrier commandeered by the Black Rainbow Terrorist group & modified with a Sound Jamming System to be used against the UN Spacy in an uprising against the UNG.)
New Macross 21 (launched in 2031, destroyed over the Vajra homeworld in 2059)
New Macross 25 (launched in 2041, landed on Vajra homeworld)

* This particular vessel was upgraded to have a second hypervelocity launcher for the sound booster units. During the last battle against the Protodeviln, the main particle cannon was converted into the sound buster cannon. This ship was destroyed, but eventually rebuilt with the secondary launcher, but with a normal cannon.

New Macross Class Super-Dimensional Carrier [Battle Galaxy]

COST: 1,439,460 CP
Manufacturer: OTEC Company/Three Star Heavy Industries/UN Spacy/Macross Galaxy

HEIGHT: 1710m in storm attacker mode [1186m]
WIDTH: [521m cruiser, 747m storm attacker]
LENGTH: 1510m in cruiser mode [1681m]
WEIGHT: 7,700,00 tons [16,550,000 tons]
CREW: 104 officers, 2165 crewmen, 450 VF pilots, 60 soldiers/security

Hull Class: MegaHeavy+
KILLS: 2200 (500 for gunship)
ARMOR: SP 110, Alpha Class (SP 80 for gunship)
SPACES: 25 + 80

Storm Attacker Mode
Torso: 600K
Arms: 300K each, plus a 200K "shield" of Beta Class armor (SP 110, DC 40, DV-0)
Legs: 500K each

MA: 34 (Mach 3)
Turn: +11
Crew Grade: A (16+1d10)

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Heavy Particle Cannon	FF	5000K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 5						
Rail Cannon (4)	All	120K	6,437,376	+1	120	U
AP						
Strike Missile (8)	F	700K	6,437,376	+1	90	U
Each missile takes 25K to destroy. Blast 15, Warm up 2						
Light Laser (30)	All	50K	123,597	+1	50	U
Missile Turret (12)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
CIDS	All	10K	36	+1	--	U

Mecha/Shuttle Compliment

VF-27	??
AIF-9V Ghost	??
SB-10 Starwing	10
Heavy VTOL	6
Multi-purpose VTOL	12
Shuttles	12
Conserax Probe	30

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (2,000 for 30 years)
Pinpoint Barrier System (heavy), Hypervelocity Launcher, Antigravity Drive

Bays
Mecha: 4 bays (480 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 2 bays (12,100 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

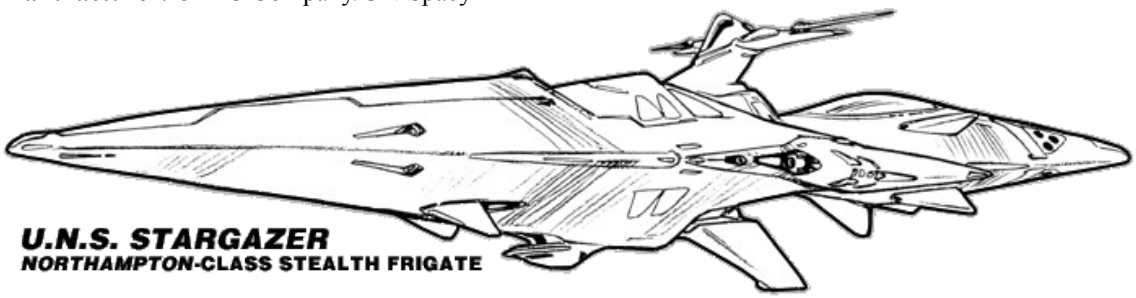
Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0), Transformable (x0.4)

Programme: Heavily modified New Macross class battle carrier docked with the Macross Galaxy colony ship.

Notes: In carrier mode, the flight decks are the arm shields, and are covered in Beta class armor (DC 40).

Northampton Class Stealth Frigate

COST: 642,136 CP
Manufacturer: OTEC Company/UN Spacy



HEIGHT: ?
WIDTH: ?
LENGTH: 250m
WEIGHT: 160,000 tons
CREW: 44 officers, 257 crewmen, 36 VF pilots, 8 soldiers/security

Hull Class: Heavy Striker
KILLS: 975
ARMOR: SP 70
SPACES: 15

MA: 34 (Mach 3)
Turn: +5
Crew Grade: A (16+1d10)

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (2)	FF	500K	6,437,376	+1	500	U
Warm Up 1						
Strike Missile (2)	F	700K	6,437,376	+1	90	U
Each missile takes 25K to destroy. Blast 15, Warm up 2						
Heavy Laser Cannon (1)	F	200K	6,437,376	+1	200	U
Light Laser (12)	All	50K	123,597	+1	50	U
Missile Turret (6)	All	7K	1200	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
CIDS	All	10K	36	+1	--	U

Mecha/Shuttle Compliment

VF-11C	28
VF-17	4
VF-19	4
VF-22	1

Optional Systems

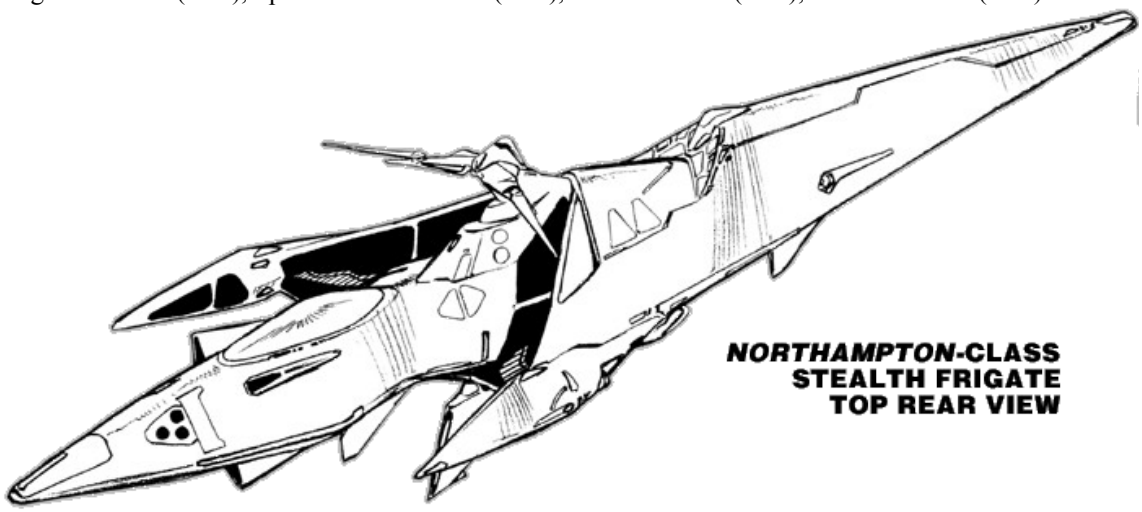
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (2,000 for 30 years) Pinpoint Barrier System (medium), Self Destruct, Antigravity Drive, Extra Space (x5)

Bays

Mecha: 1 bays (120 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 1 bays (6050 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

Multipliers

Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0), Passive Stealth (x0.2)



Programme: Designed as a multi-purpose fast vessel capable of escort, scouting, patrol, and front-line combat.

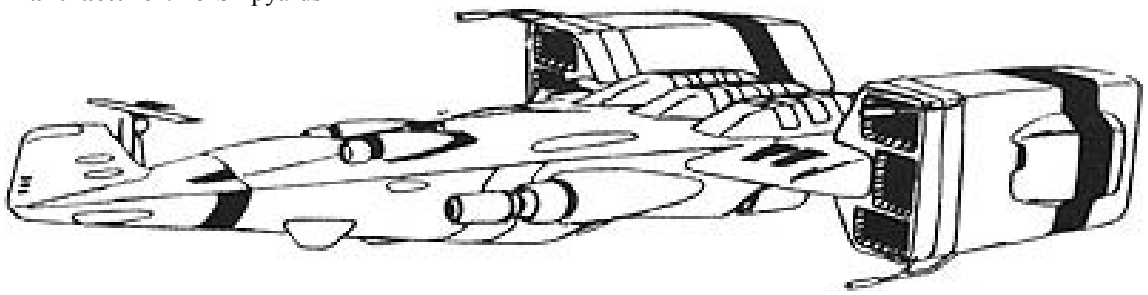
Notable Ships of Class:

Bluenose (launched 2036 as part of the *Macross 07* colony fleet)
Bolognese (launched 2036 as part of the *Macross 07* colony fleet)
Bolognese 003 (launched 2036 as part of the *Macross 07* colony fleet)
Bolognese 005 (launched 2036 as part of the *Macross 07* colony fleet)
Bolognese 006 (launched 2036 as part of the *Macross 07* colony fleet)

Carla 009 (launched 2036 as part of the *Macross 07* colony fleet)
Lucy (launched 2036 as part of the *Macross 07* colony fleet)
Stargazer (launched 2036 as part of the *Macross 07* colony fleet, regarded as the fastest ship of the fleet, destroyed 2046 by Protodeviln during Operation Stargazer)
Glendale FFM-805 (launched 2041 as part of the *Macross Frontier* colony fleet)
Amagi FFM-860 (launched 2041 as part of the *Macross Frontier* colony fleet)
Century FFM-796 (launched 2041 as part of the *Macross Frontier* colony fleet)
Eden FFM-810 (launched 2041 as part of the *Macross Frontier* colony fleet)
Arc Broom FFM-832 (launched 2041 as part of the *Macross Frontier* colony fleet)
Furious (launched 2041 as part of the *Macross Frontier* colony fleet)
Bluewhale FFM-866 (launched 2041 as part of the *Macross Frontier* colony fleet)
Starline (launched 2041 as part of the *Macross Frontier* colony fleet)

Oberth Space Destroyer

COST: 199,590 CP
Manufacturer: L5 Shipyards



HEIGHT: 57m
WIDTH: 350m
LENGTH: 155m
WEIGHT: 285,000 tons
CREW: 438 crew, 22 officers

Hull Class: Heavy Striker
KILLS: 1000
ARMOR: SP 50
SPACES: 10

MA: 28 (Mach 2)
Turn: +5
Crew Grade: C (12+1d10)

System	Kills	Range
MW Communications	200	1500 km
MW Sensors	200	1500 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Light Laser (4)	FF	50K	123,597	+1	50	U
Warm Up 1						
Strike Missile (3)	F	700K	6,437,376	+1	90	U
Each missile takes 25K to destroy. Blast 15, Warm up 2. 6 missiles per launcher						

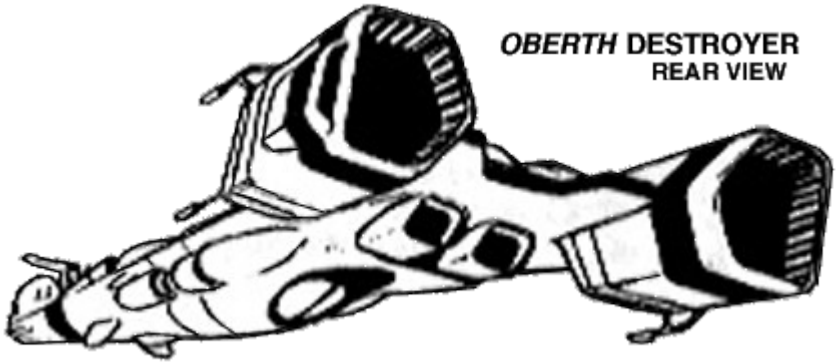
Mecha/Shuttle Compliment

SC-27 Star Goose	2

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Self Destruct

Bays
Mecha: 1 bay (25 capacity)
Crew: 1 bay (2500 capacity)
Cargo: 1 bay (1250 ton capacity)
Medical Bay: none
Repair Bay: none

Multipliers
Engines MA 28 (x0.8), Hyperspace Engine (x1.0), Weight Inefficient (x-0.2), Crew Grade C (x0.2)



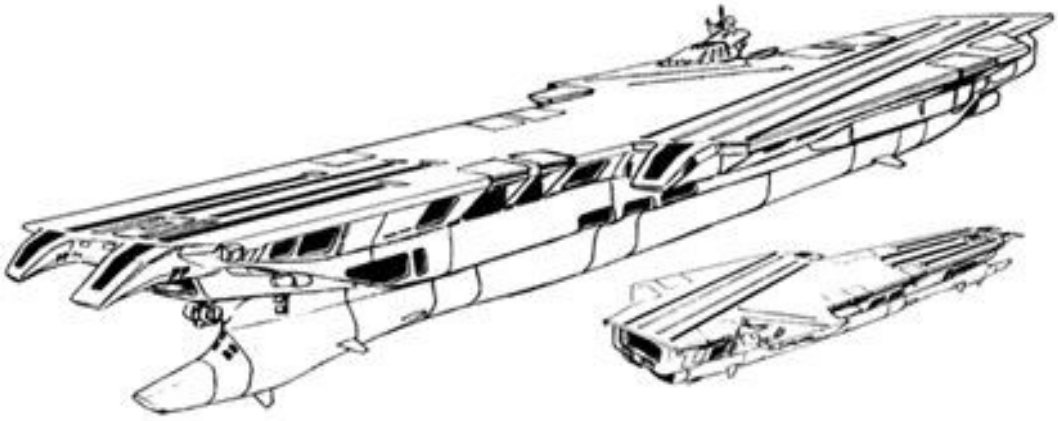
Programme: Constructed as earth's first space warship built from the ground up. The vessel had no particular flaws, but was grossly underpowered to take on Zentraedi vessels of similar size.

Ships of Note:

UES Oberth (Served from 2005-2011; destroyed 2011 by Zentraedi fleet. First Human combat spaceship.)
UES Tsiolkovsky (Served from 2005-2008, Hijacked by Anti-Unification rebels, destroyed by UES *Goddard*)
UES Goddard (Served from 2005-2011; destroyed 2011 by Zentraedi fleet. Destroyed *UES Tsiolkovsky* in first-ever ship-to-ship battle)
UES Miranda (Served from 2005-2009; destroyed 2009 by Zentraedi fleet.)
UES Circe (Served from 2005-2009; destroyed 2009 by Zentraedi fleet.)

Prometheus Class Semi-Submersible Aircraft Carrier

COST: 87,764 [+4,911,616 for Falcon Sprint Missiles]
Manufacturer: OTEC Company/Shinnakasu Heavy Industries/UN Spacy



HEIGHT: 120m
WIDTH: 156m
LENGTH: 512m
WEIGHT: 511,280 tons
CREW: 1,500 (30 Officers, 1,300 Crew, 170 Combat troops including Pilots)

Hull Class: Medium Heavy
KILLS: 1600
ARMOR: SP 60
SPACES: 16

MA: 5 (35 knots)
Turn: +8
Crew Grade: B (14 + 1d10)

System	Kills	Range
MW Communications	200	1500 km
SL Communications	100	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Decuple Missile Rack (3)	All	12K	127[2]	+2	15	6
Can fire volleys of 6 missiles at a time. 30 more per launcher in storage						
Falcon Sprint Missile (4)	All	*	192	+3	20	8*
24 missiles per launcher in storage. Nuclear, Blast 8						
* 20d10 Hits and Blast 50m at 10T; 30d10 Hits and Blast 100m at 50T; 40d10 Hits and Blast 150m at 100T, 50d10 Hits and Blast 250m at 150T; 60d10 Hits and Blast 300m at 200T; 70d10 hits and Blast 400m at 250T						
20mm Phalanx (4)	All	1K	32	+2	5	50
BV5, Anti-Missile, Ammo bin is 13K						
Torpedo Tubes (4)	All	50K	123,597	+2	30	10

Mecha/Shuttle Compliment

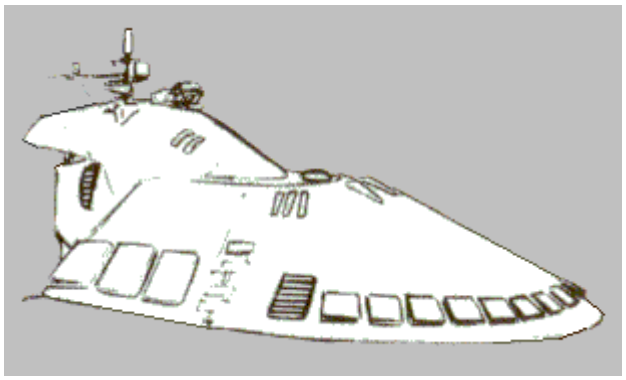
VF-1	50
Tomahawk	8
Spartan	8
Defender	16
Comanchero Helicopter	24
Sea Sergeant Helicopter	8
LH-2000 Helicopter	12

* In later years, replace all VF and destroids with the current standard VF unit.

Optional Systems
Radio/Radar Jamming [ECM Sensor/Radar, Value 5, Radius 100] , Life Support (1500 for 1 year)
Self Destruct

Bays
Mecha: 2 bays (130 capacity)
Crew: 1 bay (6400 capacity)
Cargo: 1 bay (3200 ton capacity)
Medical Bay: 1 bay (6400 capacity)
Repair Bay: none

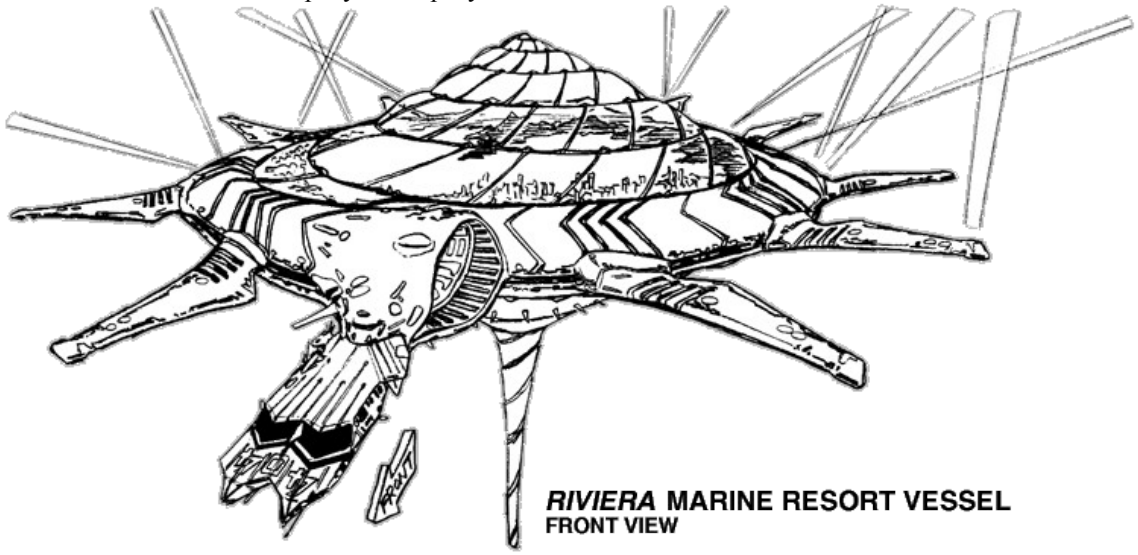
Multipliers
Crew Quality B (x0.6), Environmentals [underwater, depth] (x0.1), Engines MA 5 (-0.1)



Programme: ?

Riviera Class Resort Ship

COST: 23,485,360 CP
Manufacturer: OTEC Company /UN Spacy



HEIGHT: ?
WIDTH: ?
LENGTH: 6300m
WEIGHT: 10,700,000,000 tons
CREW: 74,300 total, excluding tourists (1000 military crew, 3000 civilian crew, 300 police/civil defense, 70,000 permanent civilian population); can accommodate a maximum of 80,000 tourists

Hull Class: MegaHeavy +
KILLS: 55,670
ARMOR: SP 110
SPACES: 5369

MA: 34 (Mach 3)
Turn: +11
Crew Grade: A (16+1d10)
Escort Vessel: Ark Royal Escort Carrier

System	Kills	Range
MW Communications	200	1500 km

AH Sensors	300	3000 km

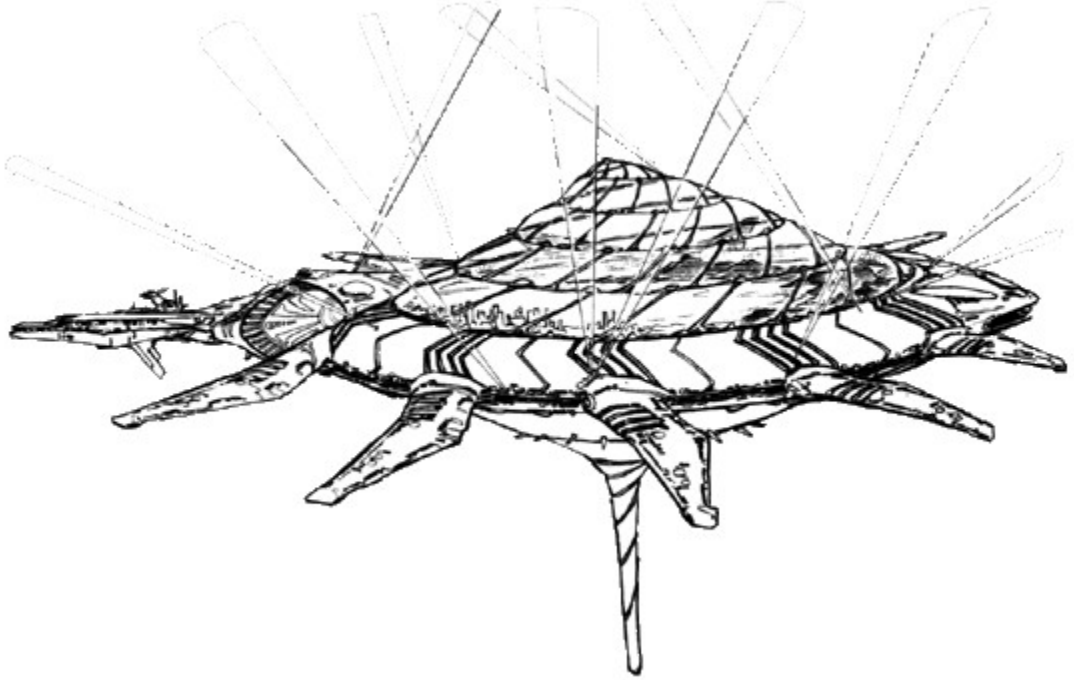
Weapon	Arc	DMG	Range	WA	Kills	Payload
None						

Mecha/Shuttle Compliment
None.

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (400,000 for 30 years)
Pinpoint Barrier (heavy), Antigravity Drive, Holographic Day/Night System, Self Destruct
Internal Sub-compartmentalization (-4 on critical hit rolls)

Bays
Mecha: 1 bay (120 capacity)
Crew: 40 bays (484,000 capacity)
Cargo: 50 bays (302,500 ton capacity)
Medical Bay: 5 bays (60,500 capacity)
Repair Bay: 1 bay (120 capacity)

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0), Weight Inefficient (x-0.2)



Programme: Designed as a long-range marine resort and research vessel as well as providing fresh seafood and kelp.

Notable Ships of Class:

Riviera 05 (launched 2034 as part of the *Macross 05* colony fleet. Captured and destroyed by the Varauta in 2045)

Riviera 07 (launched 2036 as part of the *Macross 07* colony fleet. Captured by Protodeviln in 2046 but recaptured by UN Spacy forces during the final battle of the UN Spacy/Varauta war)

SDF-1 Macross (2009-2010)

COST: 2,222,100 CP
Manufacturer: OTEC Corporation

HEIGHT: 312m
WIDTH: 496m
LENGTH: 1210m
WEIGHT: 18,000,000 tons
CREW: 200,000 personnel and soldiers; 58,000 civilians added during space fold mishap (reduced to 56,000 and then 40,000 due to attrition)

Hull Class: MegaHeavy +
KILLS: 2300
ARMOR: SP 80
SPACES: 47

MA: 28 (Mach 2)
Turn: +11
Crew Quality: C (12+1d10)

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Heavy Particle Cannon	FF	5000K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 5, Limited Firing						
178 cm Rail Cannon (4)	F	120K	6,437,376	+1	120	U
AP						
Superheavy Laser (8)	*	500K	6,437,376	+1	500	U
Warm Up 1						
Heavy Laser Cannon (1)	F	200K	6,437,376	+1	200	U
Light Laser (16)	**	50K	123,597	+1	50	U
Strike Missile (12)	F	700K	6,437,376	+1	90	U
Each missile takes 25K to destroy. Blast 15, Warm up 2						
Missile Turret (12)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Missile Turret (48)	All	7K	1200	+1	50	U
Fires volleys of up to 10 per launcher						
CIDS	All	5K	24	+1	--	U

* One is located on the main body forwards of the bridge (chest in Storm Attacker mode), one is on the lower main hull (Lower back in Storm Attacker mode), two on each main gun beam and one on the back of each engine block (back of the legs in Storm Attacker mode.) Each gun has a 180 degree arc of fire.

** Two are located on each shoulder, one on the top hull/chest, one on the lower hull/rear torso, 2 on each thigh, 1 on each secondary thruster/side torso, two on each main gun pod, and one on each lower leg. Each turret can rotate 360 degrees with a 180 degree arc of fire.

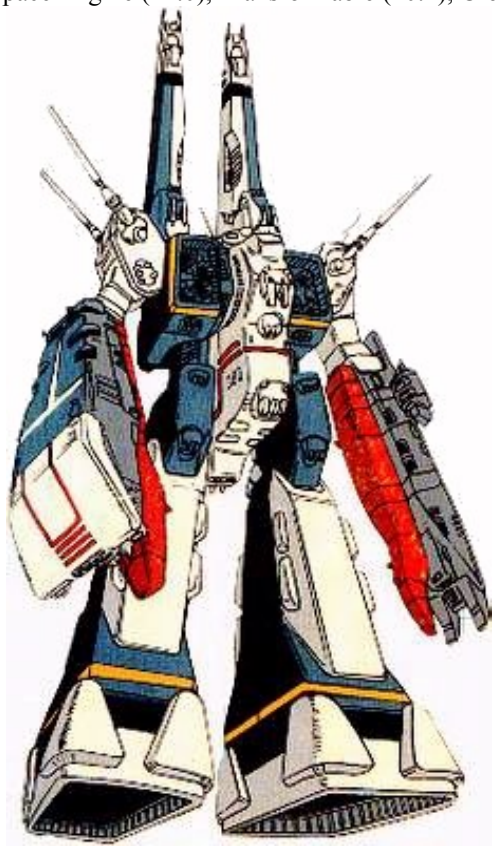
Mecha/Shuttle Compliment

QF-3000E Ghost	120
Cat's Eye Recon	35
VF-1A Valkyrie	120
VF-1D Valkyrie	12
VF-1J Valkyrie	50
VF-1S Valkyrie	30

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Self Destruct
Pinpoint Barrier System (medium), Extra Space (x10), Antigravity Drive

Bays
Mecha: 3 bays (360 capacity)
Crew: 23 bays (278,300 capacity)
Cargo: 5 bays (30,250 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

Multipliers
Engines MA 28 (x0.8), Hyperspace Engine (x1.0), Transformable (x0.4), Crew Grade C (x0.2)



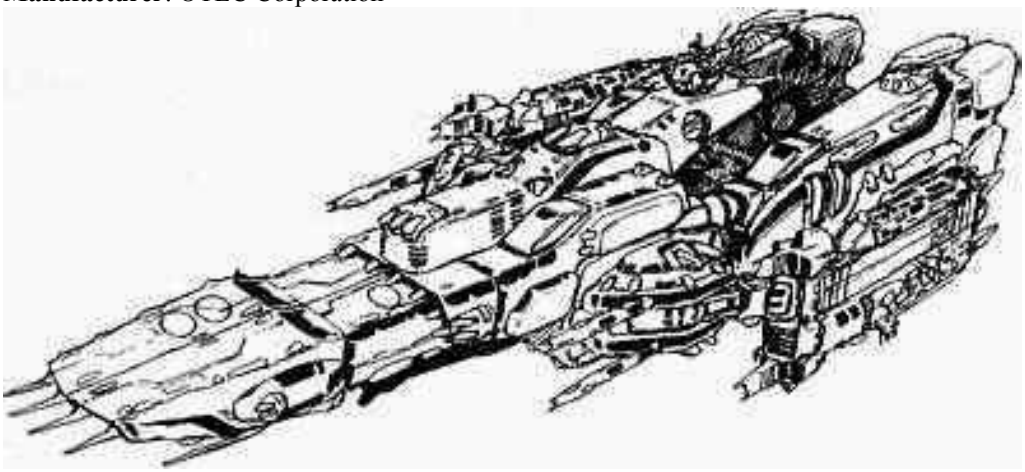
Programme: The official commissioning of the SDF-1 Macross took place on February 7th 2009, however the celebrations were interrupted by the appearance of an alien fleet of vessels which the SDF-1

automatically fired on starting Space War One. The SDF-1 Macross, its crew and unexpected civilian population survived the constant attacks of the Zentraedi as they traveled back from Pluto, they survived Boddole Zer's Main Fleet attack and the SDF-1 killed Boddole Zer and destroyed his base causing his Fleet to flee. After all of this the SDF-1 settled into Macross lake, with the new Macross City growing around it. The UN Armed Forces headquarters were moved inside the SDF-1, into the midsection of the ship where Macross City formerly resided.

Notes: Commanded by Captain Henry J. Before its overhaul in 2012, the Macross loses the following systems: antigravity drive (2009), hyperspace engine (2009), hyperspace communications (2009), main particle cannon and all four railguns (2010). CIDS consists primarily of Phalanx and Defender torsos bolted to the exterior hull.

SDF-1 Macross (2012 overhaul)

COST: 2,877,033 CP
Manufacturer: OTEC Corporation



HEIGHT: 312m
WIDTH: 600m
LENGTH: 1200m)
WEIGHT: 22,000,000 tons
CREW: 200,000 personnel and soldiers

Hull Class: MegaHeavy +
KILLS: 2700
ARMOR: SP 100
SPACES: 51

MA: 28 (Mach 2)
Turn: +11
Crew Quality: A (16+1d10)

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Heavy Particle Cannon	FF	5000K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 5, Limited Firing						
178 cm Rail Cannon (4)	F	120K	6,437,376	+1	120	U
AP						

Superheavy Laser (8)	*	500K	6,437,376	+1	500	U
Warm Up 1						
Heavy Laser Cannon (1)	F	200K	6,437,376	+1	200	U
Light Laser (16)	**	50K	123,597	+1	50	U
Strike Missile (12)	F	700K	6,437,376	+1	90	U
Each missile takes 25K to destroy. Blast 15, Warm up 2						
Missile Turret (12)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Missile Turret (48)	All	7K	1200	+1	50	U
Fires volleys of up to 10 per launcher						
CIDS	All	10K	36	+1	--	U

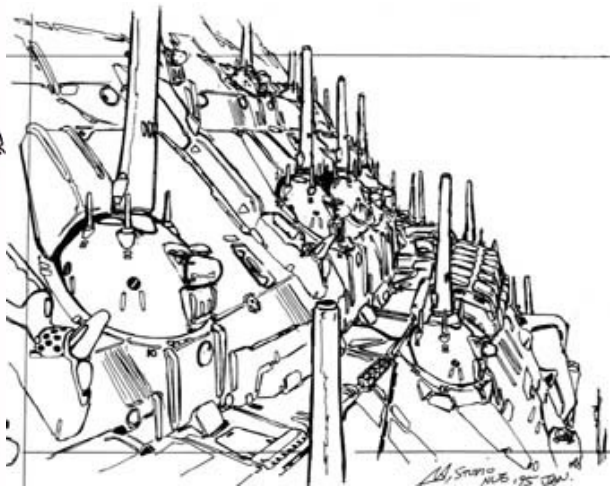
* One is located on the main body forwards of the bridge (chest in Storm Attacker mode), one is on the lower main hull (lower back in Storm Attacker mode), two on each main gun beam and one on the back of each engine block (back of the legs in Storm Attacker mode.) Each gun has a 180 degree arc of fire.
** Two are located on each shoulder, one on the top hull/chest, one on the lower hull/rear torso, 2 on each thigh, 1 on each secondary thruster/side torso, two on each main gun pod, and one on each lower leg. Each turret can rotate 360 degrees with a 180 degree arc of fire.

Mecha/Shuttle Compliment
VF-1 Super 300+
* Replace VF with current top of the line VF model in later campaigns

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Self Destruct
Pinpoint Barrier System (medium), Extra Space (x10), Antigravity Drive

Bays
Mecha: 3 bays (360 capacity)
Crew: 23 bays (278,300 capacity)
Cargo: 5 bays (30,250 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

Multipliers
Engines MA 28 (x0.8), Hyperspace Engine (x1.0), Transformable (x0.4), Crew Grade A (x1.0)



Programme: In 2012 the SDF-1 received a makeover replacing the Prometheus and Daedelus Carriers for ARMD platforms, replacing temporary bolted on gun emplacements for permanent weapon emplacements to serve as protection for the UN Armed Forces Headquarters, and Macross city. The SDF-1's last combat engagement was during the 30th Armistice Celebration in 2040 when the virtual pop idol Sharon Apple took control of the SDF-1's Intelligence Net Core and raised the SDF-1 out of Macross Lake to use its automated systems to fire on 1st Lieutenant Isamu Dyson. Lt. Dyson defeated Sharon Apple by crashing through the Macross's armor plating and destroying the Intelligence Net Core. UN Spacy engineers and technicians replaced the core as soon as everyone was awakened from Sharon's hypnotic trance. From the SDF-1 Sharon Apple was able to take control of the Earth Defense Force orbital lasers and the experimental X-9 Ghost as the SDF-1 is the hub of the Earth defense network. In early 2051, the Macross is destroyed to prevent it from falling into the hands of the anti-UN terrorist group Black Ravens, but is at some point thereafter rebuilt.

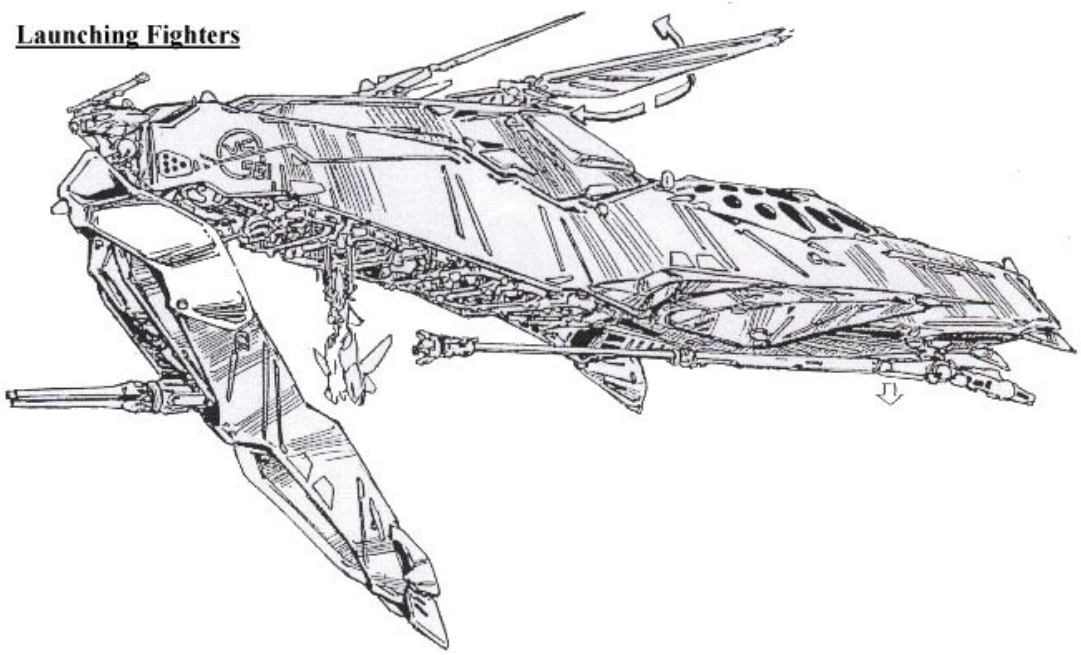
Notes: Commanded by Captain Higgins during Sharon Apple incident.

Ships of Note

SDF-1 Macross (command center of UN on earth, destroyed in 2051 and rebuilt)
SDF-4 Global (flagship of 117th research fleet, crashed on Gallia 4 in 2048, destroyed in 2059)

Sentinel Class Stealth Carrier

COST: 266,334 CP
Manufacturer: OTEC Company/Shinsei Heavy Industries/UN Spacy



HEIGHT: 24.5m
WIDTH: 18.4m
LENGTH: 114m
WEIGHT: 650,000 tons
CREW: 78 total (4 officers, 54 crew, 6 VF pilots, 6 reserve VF pilots)

Hull Class: Medium Heavy
KILLS: 1600
ARMOR: SP 70, Alpha Class (DC 20)
SPACES: 16

MA: 34 (Mach 3)

Turn: +8
Crew Grade: A (16+1d10)

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Heavy Laser	All	200K	6,437,376	+1	200	U
Medium Laser Cannon	F	100K	250,000	+1	100	U
Missile Turret (2)	All	12K	127^2	+1	50	U
Fires volleys of up to 9 per launcher						
Missile Turret (2)	All	7K	1200	+1	50	U
Fires volleys of up to 6 per launcher						
Torpedo Tube (2)	F	50K	123,597	+1	50	24
Each torpedo takes 8K to destroy. Blast 5. May fire up to 6 at a time.						
CIDS	All	10K	36	+1	--	U

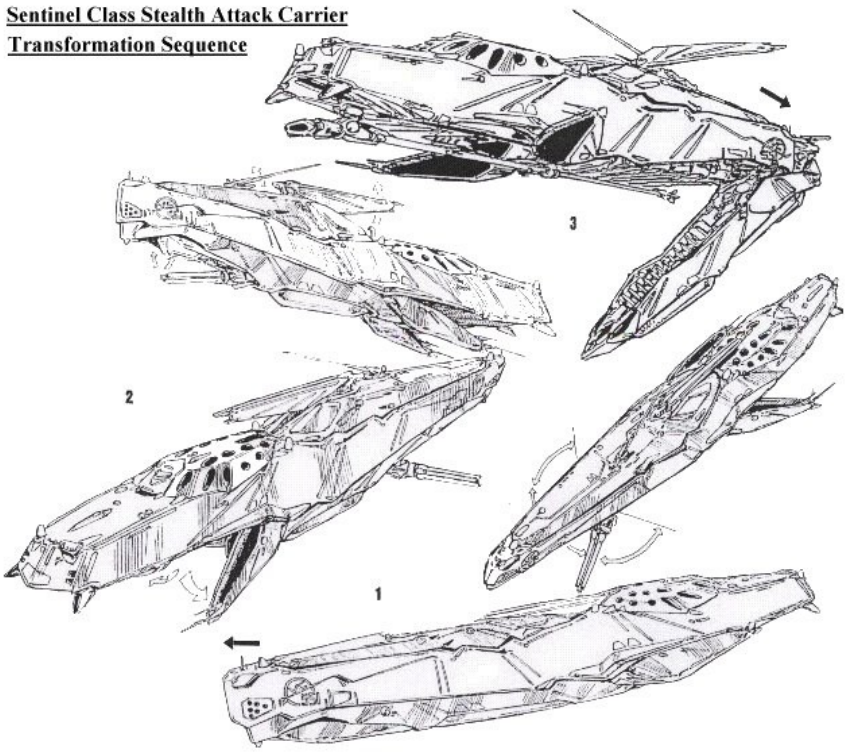
Mecha/Shuttle Compliment

VF-19 or VF-22	6

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (2200 for 30 years)
Pinpoint Barrier System (light), Antigravity Drive

Bays
Mecha: 1 bays (65 capacity)
Crew: 1 bay (6400 capacity)
Cargo: 1 bay (3200 ton capacity)
Medical Bay: 1 bay (6400 capacity)
Repair Bay: 1 bay (65 capacity)

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0), ECM Stealth (x0.9)



Programme: Designed as a surgical strike fast attack vessel with a small compliment of advanced variable fighters.

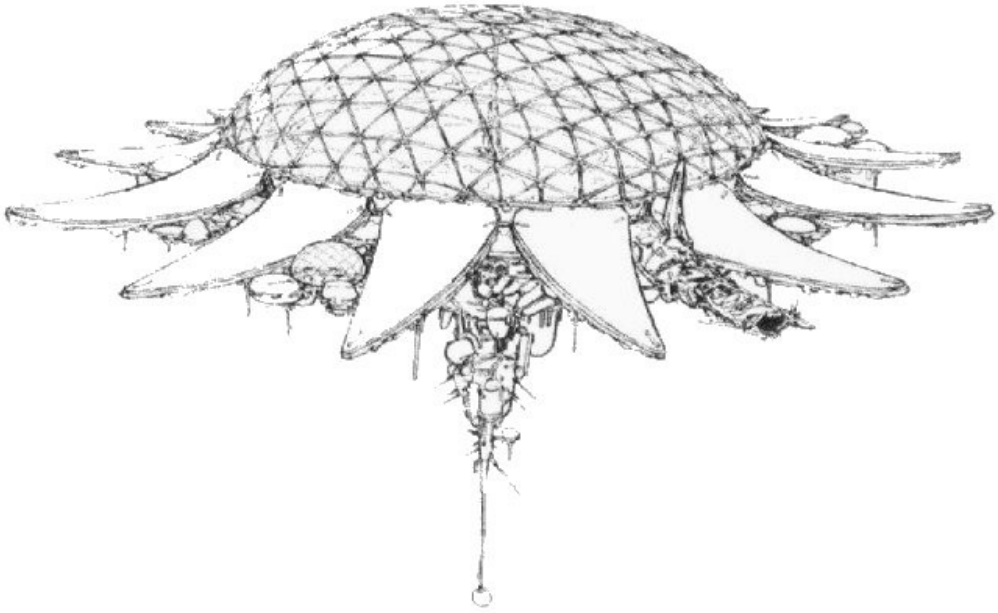
Notes: Despite standard rules about making bays space efficient, this vessel has compact bays that cost the same as normal ones, but hold less. The mecha bay and repair bay are the same unit.

Notable Ships of Class:

Valhalla III – engaged in Operation Orpheus in 2047.

Sunnyflower Agricultural Ship

COST: 5,398,105 CP
Manufacturer: OTEC Company /UN Spacy



HEIGHT: ?
WIDTH: 2750m
LENGTH: 2500m
Connector Section: 130m
WEIGHT: 150,000,000 tons [weight unknown, estimated based on similar ships]
CREW: 11,200 total (1000 crewmen, 10,000 agricultural researchers, 200 police/civil defense)

Hull Class: MegaHeavy +
KILLS: 3670
ARMOR: SP 110
Dome Shields: 14 sections each having 800K with SP 110 armor
SPACES: 169
Escort Vessel: Clemenceau Stealth Carrier

MA: 34 (Mach 3)
Turn: +11
Crew Grade: A (16+1d10)

System	Kills	Range
MW Communications	200	1500 km
STR Sensors	100	100 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
None						

Mecha/Shuttle Compliment
None.

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (15,000 for 30 years)
Pinpoint Barrier (heavy), Antigravity Drive, Holographic Day/Night System

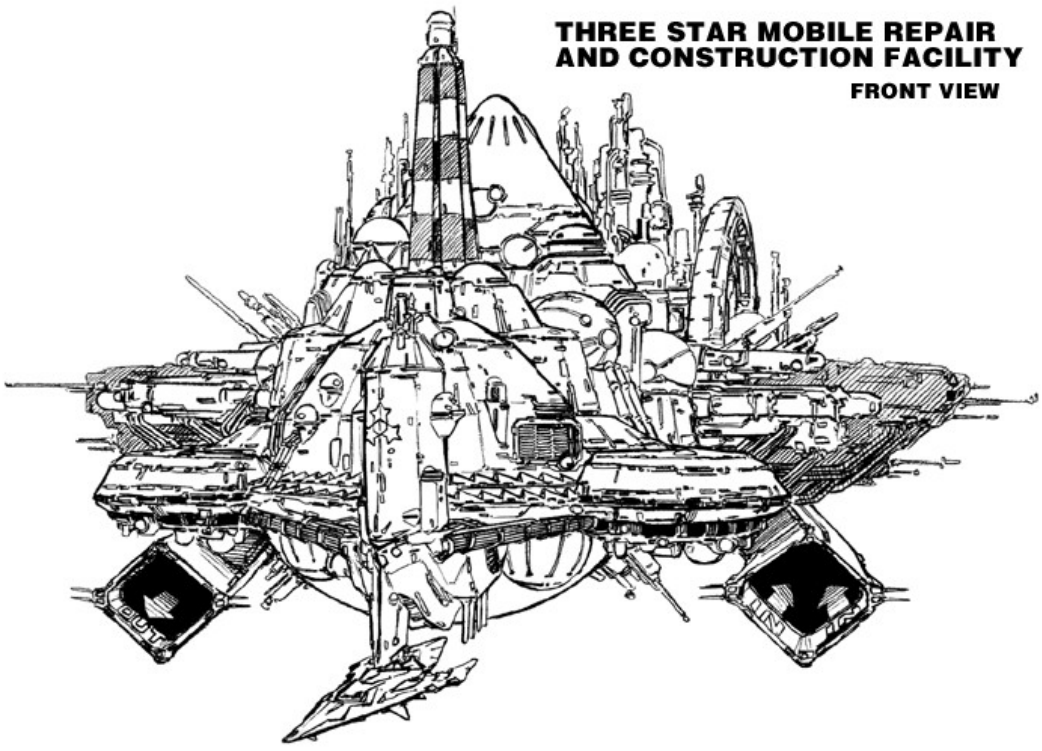
Bays
Mecha: 1 bay (120 capacity)
Crew: 10 bays (12,100 capacity)
Cargo: 50 bays (302,500 ton capacity)
Medical Bay: 1 bay (1210 capacity)
Repair Bay: 1 bay (120 capacity)

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0)

Programme: Designed for mobile food production and storage center for colony fleets. It also provides some isolated sections for researching xeno-botany.

Three Star Mobile Manufacturing Platform

COST: 1,115,610 CP
Manufacturer: OTEC Company/Three Star Heavy Industries/UN Spacy



HEIGHT: 1250m
WIDTH: ?
LENGTH: 2000m excluding rear boom (7950m total)
WEIGHT: 210,000,000 tons
CREW: 233,000 total (5000 military crew, 50,000 civilian crew, 3000 police/civil defense, 175,000 permanent civilian population)

Hull Class: MegaHeavy +
KILLS: 4270

ARMOR: SP 110
SPACES: 229

MA: 34 (Mach 3)
Turn: +11
Crew Grade: A (16+1d10)
Escort Vessel: Northampton Stealth Frigate

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

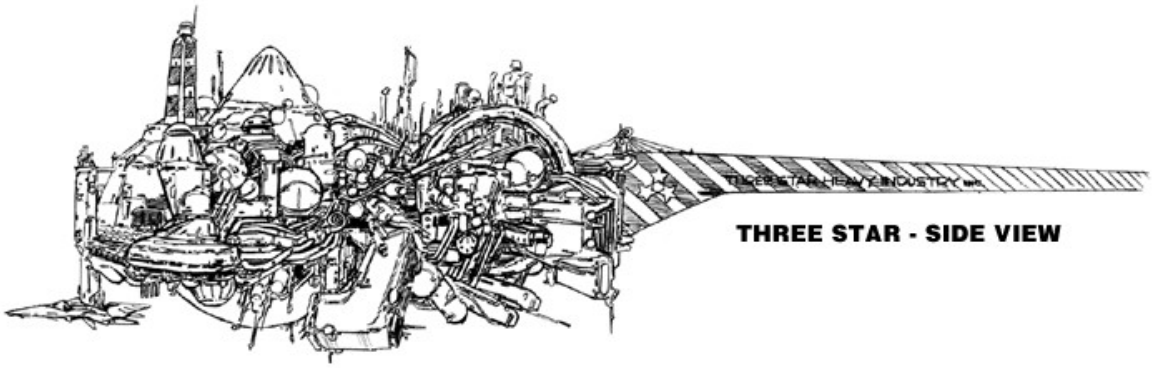
Weapon	Arc	DMG	Range	WA	Kills	Payload
None						

Mecha/Shuttle Compliment
None

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (250,000 for 20 years) Pinpoint Barrier (heavy), Antigravity Drive, Holographic Day/Night System, Self Destruct Onboard Material Processing and Factory Suite

Bays
Mecha: 1 bay (120 capacity)
Crew: 20 bays (242,000 capacity)
Cargo: 50 bays (302,500 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 10 bays (1200 capacity)

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0)



Programme: Designed to perform large-scale repairs and replace/build new ships while en-route to the colony fleet's destination.

Construction/Repair Bays

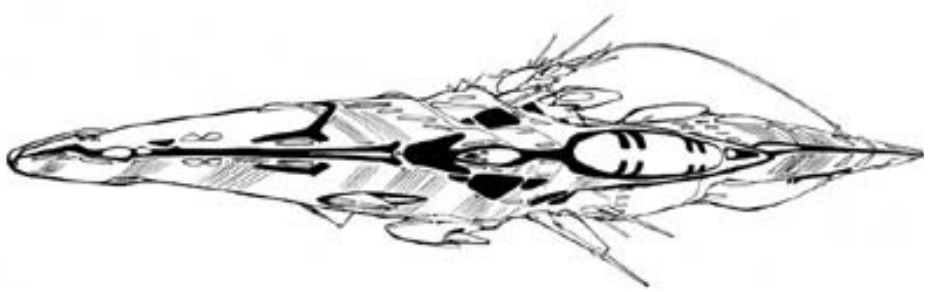
The ship has dozens of bays for building and repairing mecha and capital ships. Listed here are approximate construction times to build various mecha and ships from base components (note that these are simultaneously constructed). Each bay can produce approximately 5000 CP worth per day.

Item	Manufacture Time	Production Rate
Standard combat gear + sidearm	4 hours	2500 per week
Standard mecha (VF-11C)	3 days	36 per week
Custom mecha (VF-11MAXL)	7 days	5 per week

Advanced mecha (VF-22)	14 days	2 per week
Small starship (Northampton)	2 months	10 per year
Large starship (Ark Royal)	6 months	2 per year
Variable starship (New Macross)	12 months	1 per year

Yamagumo Class Stealth Frigate

COST: 645,250 CP
Manufacturer: OTEC Company/UN Spacy



HEIGHT: ?
WIDTH: ?
LENGTH: 250m
WEIGHT: 160,000 tons
CREW: 44 officers, 257 crewmen, 36 VF pilots, 8 soldiers/security

Hull Class: Heavy Striker
KILLS: 975
ARMOR: SP 80
SPACES: 15

MA: 34 (Mach 3)
Turn: +5
Crew Grade: A (16+1d10)

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (2)	FF	500K	6,437,376	+1	500	U
Warm Up 1						
Strike Missile (2)	F	700K	6,437,376	+1	90	U
Each missile takes 25K to destroy. Blast 15, Warm up 2						
Heavy Laser Cannon (1)	F	200K	6,437,376	+1	200	U
Light Laser (12)	All	50K	123,597	+1	50	U
Missile Turret (6)	All	7K	1200	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
CIDS	All	10K	36	+1	--	U

Mecha/Shuttle Compliment

VA-14	28
VF-17	4
VF-19	4
VF-22	1

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (2,000 for 30 years)
Pinpoint Barrier System (medium)

Bays
Mecha: 1 bays (120 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 1 bays (6050 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade A (x1.0), Passive Stealth (x0.2)

Programme: Designed as a multi-purpose fast vessel capable of escort, scouting, patrol, and front-line combat.

Notes: This is a Zentraedi styled Northampton with slightly increased armor.

Chapter 5 – UN Spacy Equipment

This chapter covers the uniforms, weapons and equipment other than mecha used by the UN Spacy forces.

Weapons

Weapons fall into different classes by their offensive capability.
Class 1 – handguns, most melee weapons
Class 2 – rifles, shotguns, bows & crossbows
Class 3 – machine pistols and sub-machine guns. Rarely available for civilians.
Class 4 – assault rifles, sniper rifles, rocket launchers, etc. Never available for civilians.

Combat Knife

This is the classic military knife, made of high-grade materials so that it is light, strong, and corrosion proof. There are versions of this type of knife that have a hollow handle that can store a few waterproof matches, a wire saw, snake bite kit and have a compass in the end. These "deluxe" versions cost twice as much as normal.

WA +0, Range melee, Damage +1d6 AP, Weight 0.25 kg, 10 SDP, 50 credits

Saber

This is a slightly curved single-edged blade carried by some officers for ceremonial purposes such as officer weddings or parades.

WA +1, Range melee, Damage +2d6 AP, Weight 0.75 kg, 15 SDP, 120 credits

Heckler & Koch PD8 Semi-Automatic Pistol

This is the standard issue 9mm sidearm for all UN personnel from officers to infantry to pilots. This sidearm also finds a good deal of popularity with gangs, security officers and with citizens because of its high reliability (requires a Class 1 weapons license for civilians to legally own).

WA +1, Range 15-100m, Damage 2d6, Clip 15, BV 1, Weight 1.0 kg, 15 SDP, 310 credits

Heckler & Koch .45cal Machine Pistol

Standard sidearm preferred by infantry units in the UN Army and Space Marines. It packs more punch than the lighter sidearm used by most other branches of the UN.

WA +1, Range 15-100m, Damage 3d6, Clip 8, BV 1, Weight 1.5 kg, 17 SDP, 437 credits

Heckler & Koch MP-9 Sub-Machinegun

This is typically issued to UN Spacy military police and security forces. It also uses 9mm rounds. This gun is illegal for civilians to own without a Class 3 weapons license.

WA +1, Range 20-200m, Damage 2d6, Clip 50, BV 5, Weight 2.0 kg, 25 SDP, 945 credits

Howard AR-21 5.56mm Assault Rifle

Standard issue for infantry and uses caseless ammunition. This gun is illegal for civilians to own.

WA +0, Range 28-450m, Damage 5d6, Clip 30 or 100, BV 3, Weight 4.0 kg, 25 SDP, 1155 credits

.50 cal Machine Gun (12.7mm)

Usually only one is assigned per platoon. This weapon is capable of laying down an impressive field of suppressive fire, and can use either an ammunition drum or be belt fed for better effect.

WA +1, Range 50-2000m, Damage 6d10, Clip 50*, BV 3, Weight 38.0 kg, 30 SDP, 5040 credits

Mini-vulcan Assault Gun

This is a multi-barrel assault gun used for heavy firepower. Like the machinegun, it can be drum or belt fed. This weapon makes a high-pitched “whirr” when running. It is useful in heavily wooded areas where a clear line of sight is difficult and you really need to mow down the enemies.

WA +0, Range 28-500m, Damage 6d6+2, Clip 2000*, BV 6, Weight 30.0 kg, 25 SDP, 6336 credits

Sniper Rifle

Primarily used for special ops and SWAT. This gun is illegal for civilians to own. Also a favorite among assassins. Typically a .50 cal anti-material rifle.

WA +2, Range 500m, Damage 6d6+2, Clip 10, BV 1, Weight 5.0 kg, 25 SDP, 775 credits

Combat Shotgun

This is favored by some infantry that is assigned to forward scout groups as well as law enforcement.

WA +0, Range 15-100m, Damage 2d10, Clip 6, BV 1, Weight 2.5 kg, 25 SDP, 742 credits

Automatic Shotgun

Also referred to affectionately as “the sweeper”. A single burst from this gun can turn a room full of people into lead-poisoned dog food. It uses standard shotgun rules (see basebook), but has a burst value.

WA +0, Range 15-100m, Damage 2d10, Clip 10, BV 3, Weight 2.5 kg, 30 SDP, 1040 credits

Anti-Mecha Rocket

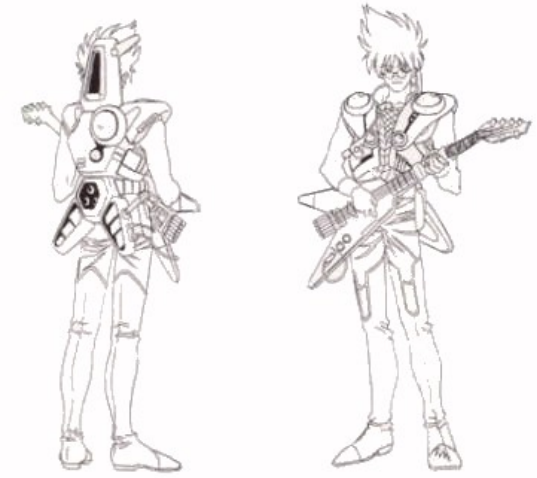
This is only assigned to UN infantry if they are expecting to be going up against enemy mecha. The launcher holds one rocket at a time, and is used in a two-man team for better effectiveness. This is effectively a portable micromissile launcher. This is illegal for civilians to own.

WA +1, Range 1600m, Damage 3K, Clip 1, BV 1, Weight 10 kg, 950 credits

Sound Energy Converter

Personal Sound Energy Device designed by Dr. Chiba for use by the members of Sound Force. Sound Energy waves are transmitted through the body's meridians and sent to the Sound Energy Converter (SEC) where a wave conversion is performed based upon the hyperspace-time-time method. It is then fed back through the body and released. The colors emanating from the Sound Energy Converter change depending on the wearers mood or emotions. One of these was attached to the flight seat of each of the Kai units in Sound Force and the Jammingbirds, although both Mylene and Basara were prone to wearing theirs out of their mecha quite frequently.

What this device does is this: for every 1 point of spiritia expended by the wearer, it boosts it as if 5 points of spiritia were spent. It takes 5 points of spiritia to activate the device, and will remain active until the wearer stops all spiritia powers. This unit costs about 3500 credits. When used in conjunction with a SES, the SEC does not contribute to conversion rates. Furthermore, it provides a +50% to all spiritia power ranges.



Uniforms

Throughout the years, the uniforms of the UN Spacy undergo many changes.

Uniforms – Most UN members have a dress formal uniform and an informal uniform or jumpsuit. Officers of sufficient rank get a fancier uniform and fleet captains have an optional privateer-style overcoat. All dress uniforms have an optional cap. The standard uniform consists of a shirt with jacket and either skirt or slacks as appropriate.

Pilot Jumpsuits – These are lightweight and very comfortable, and can be worn under a flight suit with no penalty. Ace pilots also get a beret to indicate their status. These jumpsuits provide minimal protection (SP 5) and have a radio and transponder beacon with a 1km range.

Flight Suit – All variations have a built in power cell capable of powering their distress transponder, luminescent strips, radio and life support for 2 hours. Flight suits provide fair protection against small caliber firearms (SP 10) and protect the pilot from radiation and biological/chemical weapons when sealed. The flight suit also provides verniers for movement in Zero-G, up to a flight MA of 6.

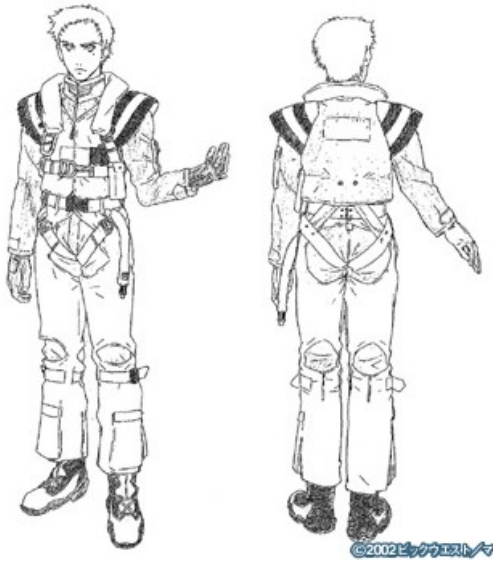
Special Ops Flight Suit – Same as the basic type, but provides increased protection (SP 15). This is available to special forces pilots after 2046. Weight 2.0 kg.

VF-22S Flight Suit – This specialized flight suit functions similar to the basic model (SP 15), but increases the pilot's effective BOD by +2 for resisting G-forces. The helmet is reinforced (SP 20) and has a HUD uplink to the VF-22S the pilot is in (+1 initiative). Weight 1.9 kg.

E.V.A. Suit – This is a heavy suit for working in a Zero-G environment. It provides better protection against firearms and environmental hazards (SP 15), but is more encumbering (-2 AGIL). Like the flight suit, it has a distress transponder, radio, verniers and life support with a 5-hour battery. This suit also includes a sleep gas dispenser to allow the person to go into "soft sleep" for up to 2 hours at a time.

Mechanics Overalls– UN mechanics get heavy duty overalls with a matching cap. All such uniforms, referred to by many mechanics as "work grubs", come in a standard orange (khaki before 2010) to make them more visible in their workstations. The overalls have two shirt pockets and a total of five pockets in the pants.

Uniforms from 2008



The flight suit from 2008 is essentially the same one as used by air force pilots before the reformation of the New Unity Government. It provides little in the way of defense against firearms.

Uniforms from 2009

The bridge officer's uniform is standardized, with colors to indicate their respective rank or duty onboard their ship. The first officer wears a yellow shirt with a white skirt and jacket with green trim. The weaponry officer wears a lavender shirt with a green skirt and jacket with yellow trim. Other bridge officers wear a yellow shirt with a light blue skirt and jacket with rust trim (sometimes rust skirt and jacket with tan trim). As shown above socks are not standard, but they are allowed. In the middle is the male standard uniform; with officers having a white shirt while the regular crew wears a khaki colored shirt. The far right is the command branch uniform, which are always navy blue with gold trim, and is worn by officers of Captain and higher rank.

When not required to wear their formal uniform (see above), crewmembers typically wear their jumpsuits. These are lightweight and comfortable, and can be worn under their flight suits, reducing their reaction time to ready for combat should the need arise. The officer's jumpsuit is white, standard crewman's is khaki, and ace pilots and squad leader's is navy. The UN flight suit has luminescent strips over the shoulders and feet and above the wrist as well as a 2-hour homing beacon to aid in locating pilots who are forced to eject in space.

Above is the optional cap given to officers of Commander or higher rank. The cap itself is white, with the brim being red or matching color for special ranks or honors.

Uniforms from 2013

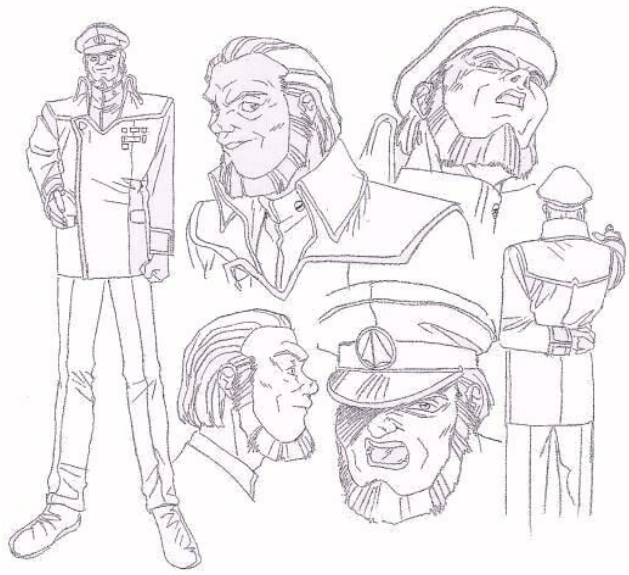
Officer's uniforms did not change significantly until 2040, however pilots' uniforms and flight suits changed to keep up with advancing technology.

The luminescent strips have been decreased in size and a set of four belt pouches have been added to the flight suit. Also, UN Spacy added an optional vest and beret to the black formal uniform for ace pilots, test pilots and squadron leaders.

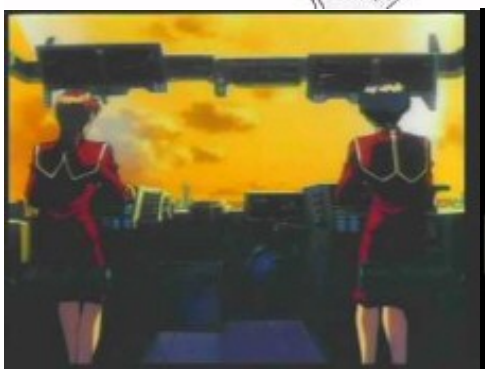
Uniforms from 2036

Above is the special forces pilot suit from 2036. It includes hard armored vambraces, chest cover and hip/pelvis components, increasing its SP to 15.

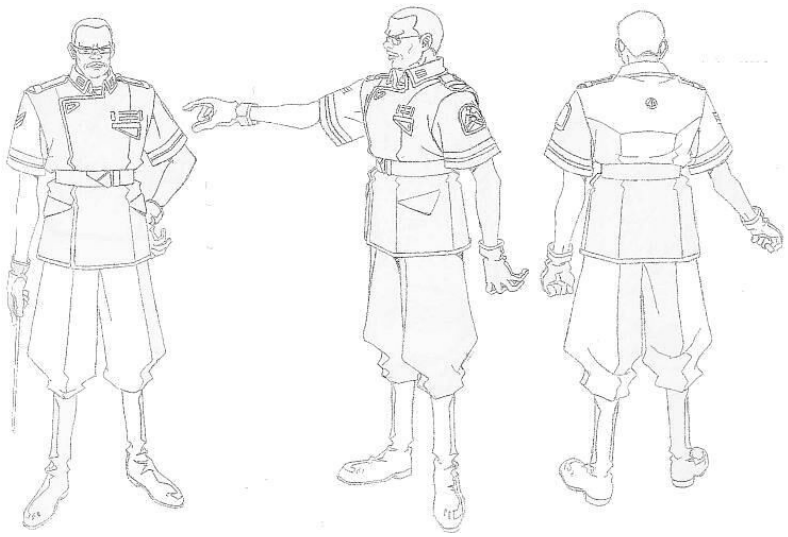
Uniforms from 2040



Above is the standard UN Spacy uniform for commanding officers of Captain or higher rank. The uniform is navy with gold trim and a white undershirt and hat. The rank insignia indicates this particular commanding officer to be a Vice Admiral.

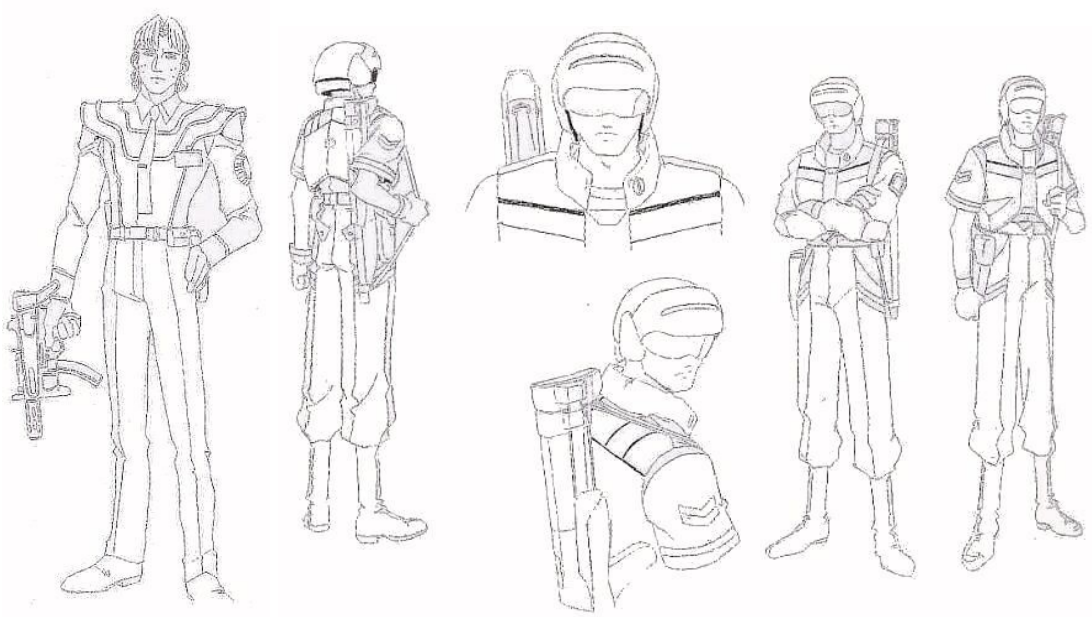


This is the bridge officer's uniform. The uniform itself is standardized, with the color denoting rank and/or duty. Bridge officers' uniform is bright red with white trim, while other operations officers wear a uniform that is gray with dark red trim. The first officer's uniform is white with red trim.

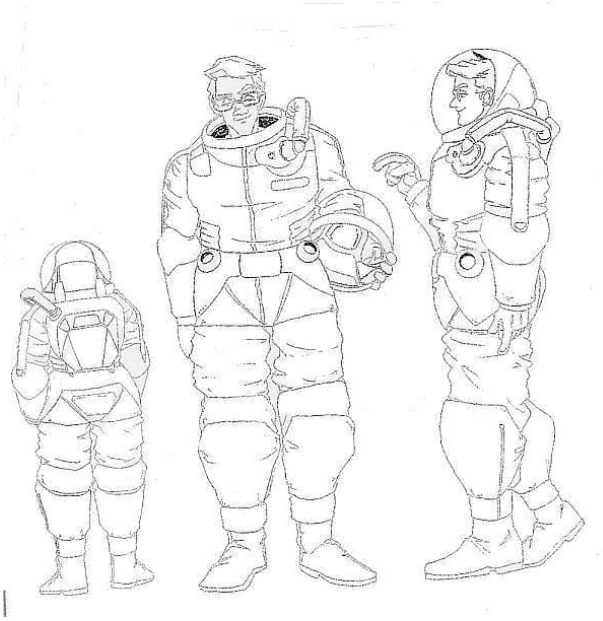


UN Spacy officers and pilots also have a duty uniform with short sleeves that they wear when not required to wear dress formals. Color schemes remain the same as formal uniforms by rank.

UN pilots have a standard blue jumpsuit to wear, with a white vest over it. The vest bears any insignia to indicate rank, unit and other special emblems. The flight suit removes the luminescent strips from the wrists.



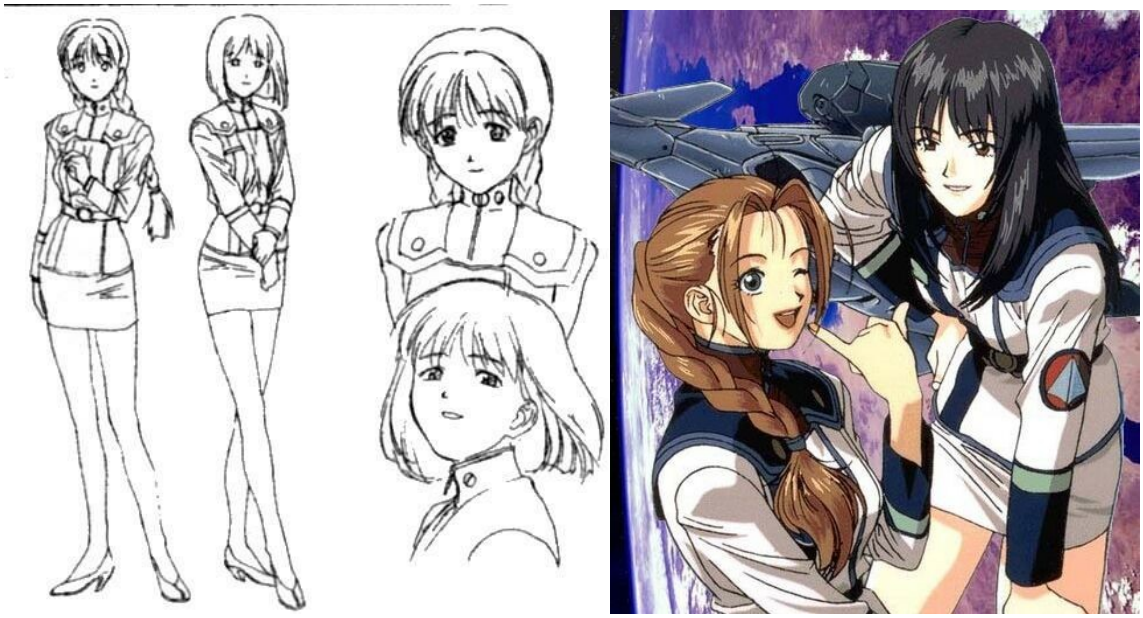
Above is the standard uniform for UN military police and security forces. These uniforms are always blue with white trim regardless of rank. He is carrying the standard issue Heckler & Koch MP9 sub-machinegun. On the right is the uniform of a UN security officer or soldier with standard issue assault rifle, HUD helmet and flack vest.



Standard heavy duty UN Spacy spacesuit designed for E.V.A. activity. This suit also has a sleep gas dispenser to go into “soft sleep” during flight.

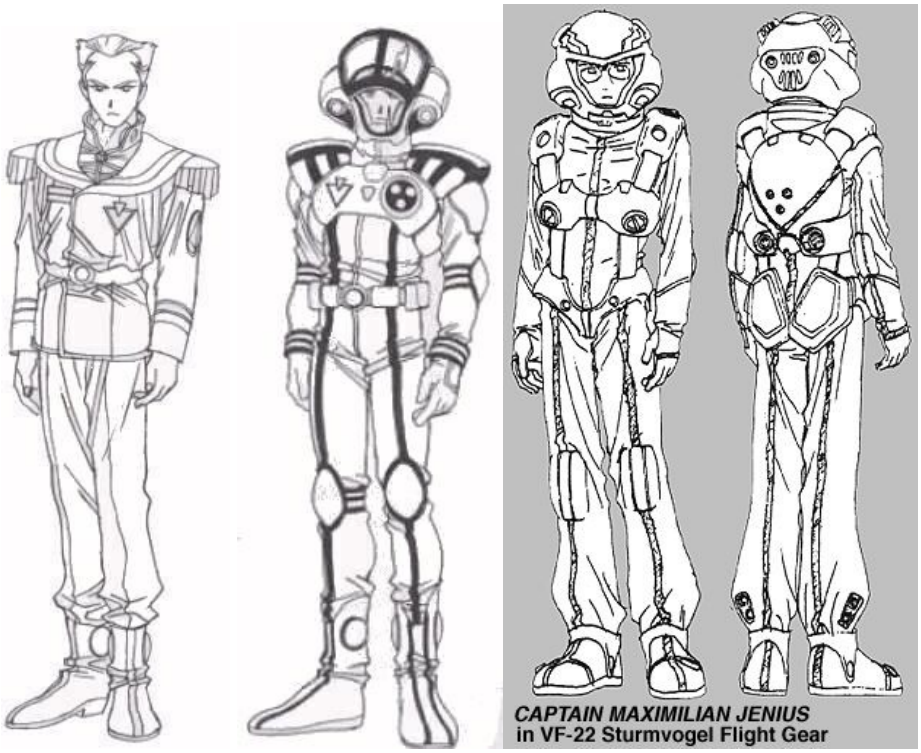
Uniforms of 2045

Colony Fleets Commanders (as shown above) wear slightly more ornate versions of the standard UN Colony Fleet uniform, which includes a privateer-style cloak. Their uniform like that of the rest of the bridge crew is also white. Their rank badges are mainly purple which denote them as the Commander of the Colony Fleet. Regular Colony Fleet Captains wear similar uniforms but less ornate, and stick more closely to standard UN Uniforms.



Above is the standard female Uniform for all Colony Fleet personnel of around 2045. Bridge personnel on Colony Fleets do not wear red uniforms but white ones with

dark blue on the cuffs and mantle. Regular ships crew wear a light tan/cream colored version of the same uniform.



The dress uniform is navy blue, although Special Forces pilots also have gold tassels on their shoulders to indicate their status.

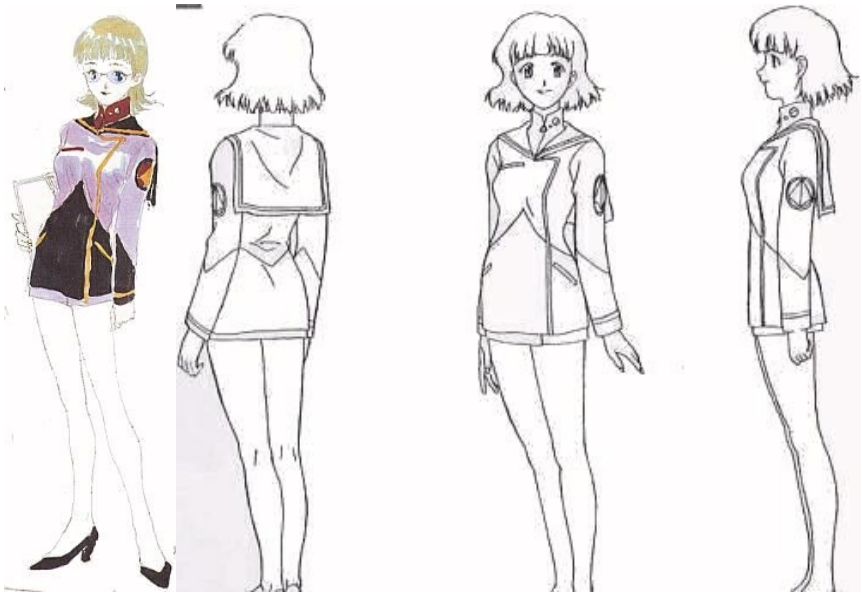
The flight suit has the previous luminescent strips removed from the feet, and the shoulders undergo cosmetic changes. Standard pilots wear a white flight suit, with Special Forces and ace pilots wearing a dark blue one.

The VF-22 comes with a custom-designed flight suit for the pilot instead of the standard UN Spacy-issue design used by most VF pilots. This flight suit consists of an upper and lower g-suit that promotes circulation even during high-G turns, thus decreasing the possibility of pilot's blacking out in combat (+3 BOD check). The flight suit also comes with a specialized HMD helmet which can display computer graphics and overlays over what the pilot sees, providing additional information. Although the system is not a great substitute for the BCS and BDI systems in the original YF-21 prototype, it does provide the pilot with additional information and helps combat battlefield confusion. The one disadvantage of the flight suit is that it is customized for the VF-22 and is NOT usable in other aircraft.

Uniforms of 2048

On the left is the newer-styled standard issue uniform, with the red color indicating a bridge officer. The middle is a mechanical engineer's overalls for use in a pressurized bay or outdoors hanger. The flight suit has the luminescent strips on the wrist again, and the blue color indicates the individual as a Special Forces pilot (regular pilots get a white flight suit).

Uniforms of 2050



Once again the officers' uniform undergoes a cosmetic change. All uniforms are a standard white with black on the lower skirt/pants. Bridge officers have a red undershirt to indicate their status, while standard officers have navy blue. Also added in is the old style sailor's mantle.

Uniforms of 2059

The flight uniforms change again with the change to N.U.N.S. The flight suits are white with black trim, and the luminescent shoulder pads. The S.M.S. flight suit (center) is instead dark blue with a white harness. Both versions have a bio-monitor and locator beacon in the chest plate.

Although the S.M.S. is a private company, a contract by their owner subordinates them to the UN Spacy. The captain wears a black uniform with a green half cape. The bridge officers wear crimson uniforms with white trim, boots and gloves.

Armor

Standard armor types used by the UN and other groups. If you need to create new armor, see the chart in Mekton Zeta on page 45.

Flak Vest

Flak ballistic mesh vest that covers the front and back torso, and the shoulders. A flak vest typically has 2-3 pockets as well as loops to attach most firearms. Comes in all camo patterns as well as army or unit specific colors.

SP 18, Weight 0.5 kg, 98 credits

Combat Boots

Standard issue heavy duty boots. Good for all terrain types as well as for stomping on your opponent when he's down. Waterproof and flame resistant too. Comes in black, dark gray, olive drab or dark brown.

SP 15, Weight 0.8 kg, 112 credits

Combat Helm

Standard issue light multi-polymer plate helm with clear visor. Comes in all standard camo patterns as well as army or unit specific colors. Add a polarized visor for an additional 20 credits. The face of this helm is open, but attacks suffer a –6 penalty for called shots to the face.

SP 20, Weight 1.6 kg, 106 credits

Standard Infantry Suit

Light multi-polymer plate for the front and back of the torso over heavy ballistic mesh jumpsuit. Comes with combat boots (above) and a heavy multi-polymer plate combat helmet similar to the one above but with better SP and a built in radio. The suit has two large pockets in each leg and one smaller pocket in each bicep. The suit has reinforced loops for attaching weapons. Comes with standard combat belt.

SP 20 (torso) 25 (head) 15 (arms/legs), Weight 4.1 kg total, 450 credits

E.V.A. Suit

Full environmentally sealed suit. The integrated pack has verniers for 0-G movement (MA 4) and 4 hours of life support. The helm has a moveable heavy polarized shield, water dispenser, radio and soft sleep gas dispenser for long flights. Comes with two easy-use emergency sealing patches.

SP 15, -2 DEX rolls, Weight 1.6 kg, 502 credits

Linear Frame

A linear frame is a suit of heavy multi-polymer plate armor with micro hydraulics and myomar bundles to enhance the wearer's strength. This suit is used primarily for heavy construction or search & rescue missions in hazardous environments. The suit is fully environmentally sealing with a 3 hour life support. The boots contain reflexive magnetic plates for easy 0-G movement along a ship's hull. The helmet contains a HUD with anti-dazzle and thermal vision capabilities and a radio link.

The suit grants the user a +4 bonus to STR and BOD, but reduces DEX and MA by 2 each. All melee attacks get a +4 damage bonus. In addition to the SP, any damage that does get through the suit is reduced by 3 points to a minimum of 1 damage.

SP 28, Weight 43.0 kg, 1056 credits

EX-Gear

EX-Gear (Extender Gear) is known as a type of powered suit, enables the comprehensive ability magnification of the wearer not only by power assisted flight (space flight)/traveling unit but also with night-vision, telephoto features, communication features, and data retrieval functions. However, this is only one side of EX-Gear. A more

special function is that it forms the core of the cockpit system "EX-Gear System" for the VF is the point. EX-Gear is part of the cockpit mechanism for new VF, "EX-Gear System", transforms into a G-proof seat in the cockpit and the surrounding equipment (the control stick and foot pedals) serves as the interface that connects the VF and pilot. The VF-25 Messiah is the typical fuselage which corresponds to this system and was adopted in other variable units such as the VF-171 Nightmare Plus.

The EX-Gear's driving force is that the exoskeleton has a transformation function to a G-resistant seat for VF cockpits. In addition, control sticks are built into the forearm exoskeleton in addition to foot pedals built into the leg exoskeleton functioning as the man-machine interface that directly controls the VF. However, it does not mean that merely a powered exoskeleton function is incorporated with a VF interface. A pilot's habits are memorized by the self-learning function and it can control with the feeling of "wearing" the VF like wearing EX-gear by reflecting in the operation program of the VF.

If skilled with EX-Gear, operation of a VF system with a corresponding type is possible (Alto Saotome, who was a civilian, boarded a VF-25 for the first time, largely depended on this feature).

Although G-proof functions are mentioned as an important function of the EX-Gear System, it differs from the operation system; when the EX-Gear transforms, it is attained by becoming a G-proof seat. The G-resistant seat is intended to automatically adjust so that the burden on the pilot is reduced and these G-proof seats are said to be a feature which harnesses the EX-Gear's drive characteristics and the transformation mechanism.

Moreover, the high-maneuverability powered suit functions of the EX-Gear is also used as part of the escape systems. Thus, the EX-Gear system with the conventional cockpit VF, is becoming popular as a device with incomparable versatility.

There are two primary models of the EX Gear, the EGP-03/05 military grade version and the PS/ML-21 civilian version.

As outlined in Chapter 1, the EX Gear aids in protecting the pilot from excessive G-forces (reduce BOD requirement of Ace Pilot to 4 and increase the G load of the pilot by +8).

<u>Features of the EX-Gear</u>

* Transformation

When connected with a VF, EX-Gear transforms into a G-proof seat where the control sticks and foot pedals are attached (consoles are arranged in the VF cockpit).

Therefore, the pilot in the cockpit is lightly dressed equipped with only inner-wear and a helmet for the EX-Gear and moves easily compared to a usual pilot suit.

The pilot's head, when the head cover of the EX-Gear moves to the seat's rear, is only equipped with the usual helmet. The head cover's base is the head rest.

The chest, shoulder and renal sections are freed from the main frame of the EX-Gear and serve as a G-proof seat with a flexible range of motion. Parts that restrain the pilot are not seen.

After ejection, the flight unit, which is used for the EX-Gear's independent movement, the central thruster module is arranged at the rear of the seat and the wings are arranged at the seat between the arm rests.

The arms of the EX-Gear unfolds and becomes an armrest. The interface built into the forearm section functions as the control stick and throttle lever.

The leg cavity section cover unfolds and a foot rest forms. In addition, the foot pedal built into the bottom of the cavity section is exposed.

* Escape mechanism

EX-Gear with flight function is assumed to be an escape mechanism. Ejection from the airframe is performed by the rocket motor of the EX-Gear support frame. During supersonic flight in atmosphere, the shock wave generating board under the seat is ejected and the pilot is protected. The canopy is separated before the escape. It functions as a space suit and for military use, the survival time is about 3 days or around 1 week is possible in suspended animation mode.

* Remote operation outside the airframe

The system which operates the VF outside the airframe is registered to an EX-Gear beforehand. Although in combat is considered to be difficult, simple operation is possible and performing transformation and movement according to motions of the EX-Gear. Through the support A.I. that simple operation is presumed.

* External control connection

It can control a machine equipped with an EX-Gear System by connecting other EX-Gears from the outside. Control, including firearms-use, is possible through the connected EX-Gear without transforming into the seat. When the pilot is incapacitated, it can be used for rescue by a second person.

* Improvement of Gunner Kit and shooting accuracy

Equipping EX-Gear with the Gunner Kit option, it links with the FCS precision fire-control booster, FCF-21b. A Gunner Kit learns the shooting timing of the shooter improving the shooting ability by communicating to the booster; grants +1 WA after a minimum of 40 hours of use. This option is usually not available with civilian models.

* Reduction of Crew Requirement

The VB-6 Koenig used by the SMS is modified with EX System so that it can be controlled completely by a single pilot rather than requiring a crew of three.

* Sensors & Communications

All models come with passive amplification nightvision, x50 magnification, advanced "blue-tooth" communications to 250km and 1 TB of onboard memory storage.

<u>EGP-03/05 Military EX-Gear</u>

The military EX-Gear (military specification EGP-03/05), evolved as a multipurpose reinforced suit from the popular mechanism known as "a light, powered-suit for work" in the public sector. Various devices like the leg-section hover unit and the exclusive head gear are fully-dedicated, while the output is about 200% greater and operation time is extended compared to private/civilian sector version. Additionally, an advanced self-learning function to interface with a variable fighter allows for the sensation of "wearing" a variable fighter by allowing the operating program to memorize

data and reflect the habits of the operating pilot, allowing for high-speed precision control (grants +1 MR in all configurations after the pilot uses the system for a minimum of 40 hours).

For the military-use powered-suit, EX-Gear is also versatile and has several options available. Mostly difficult for ordinary human-use, large-size firearms and accelerator equipment for takeoff are unique to the EX-Gear. In addition, those who received special education also tended to be accident prone, and since it had the danger that it could be used to cause a crime, a special clause for management was also prepared (requires Permit 7 for military grade).

For the VF pilot. The occupant area of the protector is large, enhancement of various equipment, and equipped with a hover unit on the leg section are prominent. It has been adopted by the New UN Forces as well as the private military provider, S.M.S For flight, the EX-Gear adds on the form of head gear on the helmet.
EGP-03/05: STR 15, SP 30, SDP (arms 30, legs 40, torso 60, head 20, wings 20, thruster block 20); Flight 500 kph, Ground 55 kph, Height 150-225cm, Weight 75kg full load; 15 CP

PS/ML-21 Civilian EX-Gear

The standard, versatile, utility-type PS/ML-21 EX-Gear is for private/civilian-use and is compatible with the military standard. It is therefore possible to connect with a VF and is used by private/civilian training schools like Mihoshi Academy. However, since high-quality parts are used, it is very expensive. The standard civilian-use PS/ML-21 EX-Gear is manufactured by several space work/space-flight machine manufacturers but there is no big difference in the basic design besides coloring and options.

There are private enterprise/civilian EX-Gear models exclusively for ground sports which are cheap and lightweight for mobility and flight models that are specialize for flight. Most generally sold currently for sports are simplified further. The civilian model only requires Permit 2, and is typically included as part of schooling.

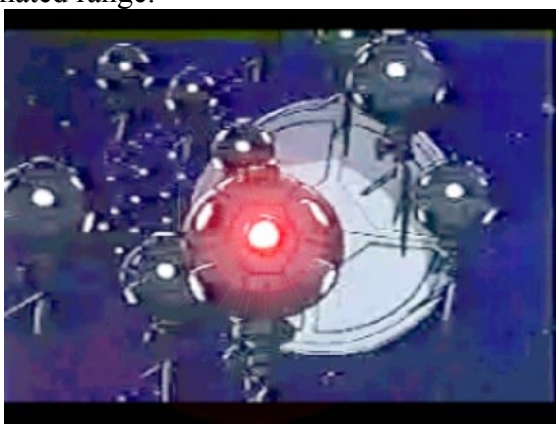
For training-use in pilot training courses. Although there are fewer exoskeleton parts, it is possible to connect to a VF cockpit; it has performance which is not inferior to the military version, possessing strength amplification, flight capability, etc.
PS/ML-21: STR 10, SP 15, SDP (arms 15, legs 20, torso 30, head 10, wings 15, thruster block 15), Flight 280 kph, Ground 55 kph, Height 150-225cm, Weight 50-55kg full load; 10 CP

Large Equipment

Conserax Probe

The Conserax Probe Module is a highly advanced recon and intelligence gathering system that was developed by UN Spacy to assist their colony missions in gathering information which might otherwise be too risky for a manned recon craft. The

device consists of a fuel module, 10 individual probes, and a nose section that acts as a signal relay satellite to boost and transmit any information gathered by the probes. The probes themselves are designed for remote guidance from the launching ship via an operator on the bridge which allows the operator to switch between probes, designate targets to track, and move probes into better position to observe. When not being directly controlled, the probes will switch over to a simple AI system in which they'll continue to observe, move into position to examine their last assigned target, and avoid enemy fire to the best of their ability. The system has been proven to be very effective in a range of activities from observing battlefield conditions and gathering intelligence on enemy craft to orbital surveys on uncatalogued planets. The launching system is fairly simple. The probe is designed to fit into a standard anti-warship missile tube. The probe is fired, expends its fuel towards the target area, and then separates into the probe system when it has arrived at the designated range.



Manufacturer: OTEC/UN
Length: 12.5m (casing), 1m (probes)
Weight: 3,000 kg (casing), 200 kg (probes)
Systems:

Casing is 40K with SP 20 armor, each probe is 20 Hits with SP 10 armor

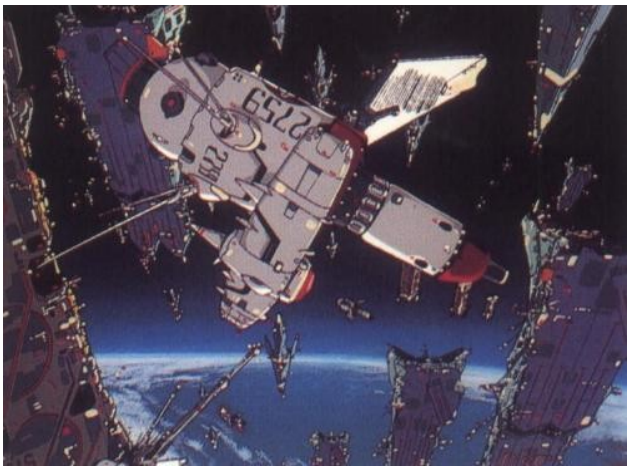
AH Class Sensors: 3000 km

Video is extremely fine resolution and videos can be enhanced through a variety of filters and sensors including infrared, low-light, 300x magnification, and a comprehensive radiation sensor suite.

SL Class Communications: 1775 km

Orbital Defense Satellite

These small but powerful satellites are used by the UN Spacy for orbital and perimeter defense in space. Thousands of these satellites surround the space around Earth controlled by a UN Vessel. Armed with a particle beam cannon, radar tracking system and basic encrypted communications system the defense satellite is given commands by its controlling operator, using its sensors to track onto targets and opening fire. The defense satellites were designed to supplement mecha and ships of the line in defending strategic sites of importance.



Manufacturer: OTEC Company/UN
Length: 3.5m
Systems

SL Hull (200K) with LW Armor (SP 20)
Light Laser: +1 WA, 50K, Range 123,597, 50 Kills, 1383 CP
LW Class Sensors: 160 km, 100 Kills, 100 CP
SL Class Communications: 960 km, 50 Kills, 50 CP
Internal Automation (Power 5, Portfolio 2: Gunnery, Awareness/Notice)

Dimension Eater Bomb

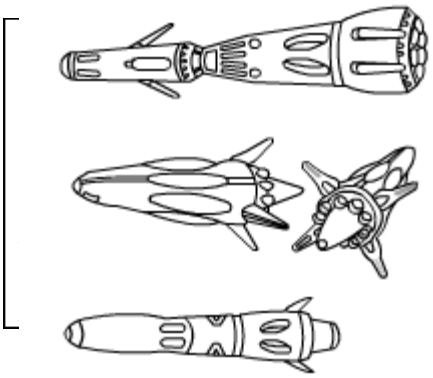
This device essentially creates a space fold bubble then collapses it to suck everything within the area into superdimensional space, destroying it instantly. There are two scales; fleet and planetary (fighter scale ones are found in Chapter 1). There is no damage listing; if you are caught in the blast, you die. These weapons don't care how many Kills your armor/servo has and they don't care about armor or pinpoint barriers; even the omnidirectional barrier of the Protoculture can't stop this weapon.
* Theoretically it could be possible to survive, since any victims would be pulled into the energy sub-dimension that the Protodeviln originated...
Fleet – Range 0, Blast 1000 (50km)
Planetary – Range 0, Blast 100,000 (5000km)

Chapter 6 – Zentraedi Mecha

When the Protoculture created the Zentraedi, they meant for them to be "biological weapons", and therefore completely disposable. As such, their mecha were little more than a weapons system held together with flimsy armor. The Meltrandi fared much better, being intended for ace pilots. Meltrandi power armor is much more durable and has more sophisticated systems to enhance their performance.

Missiles

Zentraedi missiles differ from the ones used by the UN; again, the Zentraedi get quantity over quality. The laser missile is a missile that breaks apart and deploys multiple micro-drones that fire low-scale lasers throughout the area to make the "blast" effect. The anti-Evil missile is only used by the Migg Pitt unit.



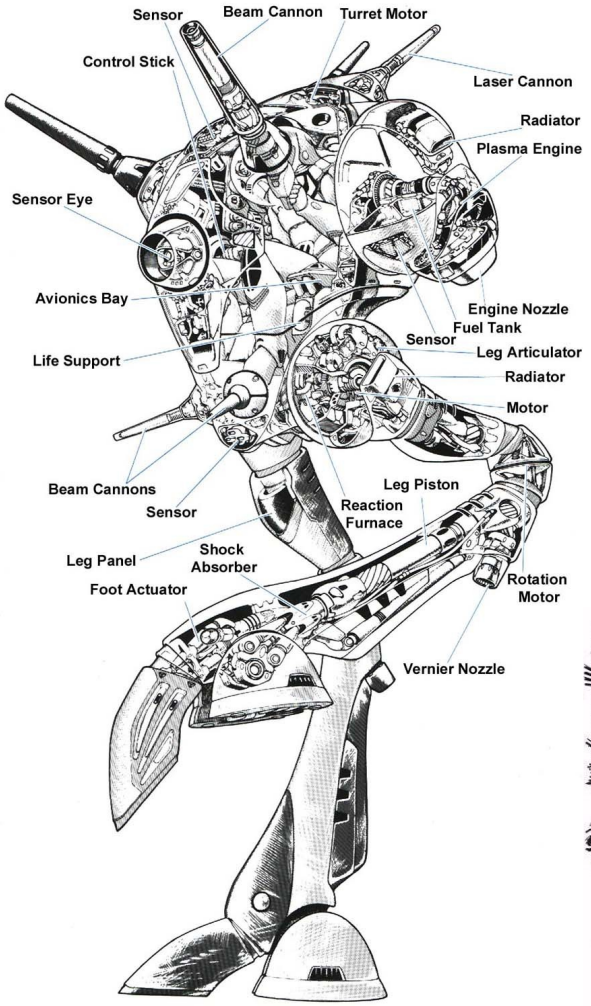
MG	Cost	Notes
2	2.3	CMV, Queadluun Series
3	0.7	Gluuhaug Regult
5	6	AP, Serauhaug Regult*
10	4.5	Blast 1, Quel-Quallie
7	1.4	Serauhaug Regult
5	2.6	Raulon-Ve Fighter Pod
4	1.3	Blast 1, Gluuhaug Regult
5	12	Blast 2
20	1075	Blast 2, Long Range, Corvette Scale

* This missile requires a Del Regult for targeting.

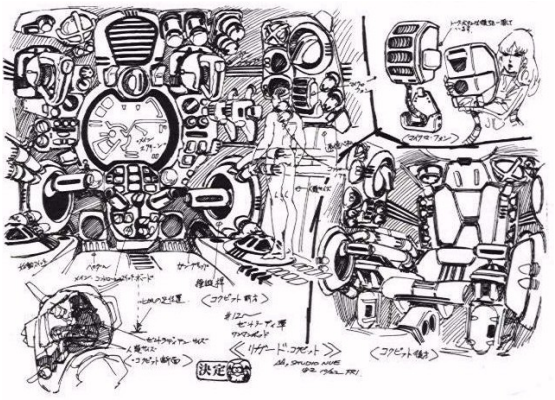
Battle Pod Leg Servos

Even though the battle pods are much heavier than the UN's VF series, they could easily run as fast as a VF-1 in gerwalk configuration. This is most likely due to advanced leg servos to allow them a faster running rate. These are only available to the pods, and cannot be used for any of the Zentran or Meltran power armors.

MA Bonus	Cost	Spaces/Leg
+50%	x0.2	1
+100%	x0.3	2
+150%	x0.4	3
+200%	x0.5	4



Regult schematics ^



Regult cockpit ^

Armor

As mentioned many times, Zentraedi mecha are not heavily armored. The Protoculture used low-mass tungsten composite plating that is the standard for most Zentraedi mecha. Aside from the fair protection provided against projectiles, missiles, and other kinetic weapons, this armor is also has limited resistance to plasma globes (annihilation discs), lasers, and fair against particle guns too, owing to the fact that the armor can flake off and evaporate in layers under fire from such high-energy weapons, taking much of the weapon's energy and converting it into the latent heat of sublimation in the armor. The armor stops all small arms fire, and has fair resistance to all weapons commonly mounted on combat mecha. Meltran mecha use standard armor.

In Mekton terms, most Zentran mecha use ablative armor (x0.5 armor cost multiplier). The Meltran mecha use standard armor.

Inertial Dampening System

This highly sophisticated system is only found in the Meltrandi power armor suits. The system is woven throughout the armored suit to help reduce the G-forces created by high-speed maneuvering. Because of this system, the Meltran mecha are the

most dangerous mecha in the combined Zentraedi/Meltrandi army. In 2039, this system is incorporated into the YF-21/VF-22, and in 2058 in the VF-25 and VF-27. This system is found in all Meltran power armor.

In Mekton terms, this functions as ACE +100% (x0.2 cost multiplier).

Bitoqua Automatic Attack Drone

Late in the era of the Schism War between the Supervision Army and the Inspection Forces, the Inspection Forces developed these sophisticated Attack Bits to augment certain powerful frontline units. The Magzemig La, and Migg Pitt were two of the heavy units designed to use this advanced weapons system. Essentially these drones were designed to autonomously fly with the mother craft, take targeting data either from the pilot or the mother craft, and fire upon these enemy units. The onboard combat computer was aware of the combat zone and could dodge incoming enemy fire without input from the pilot. When the mother craft is destroyed, the Bits become inactive. Most of the Attack Bits produced were designated for specific units. However, the Bits are controlled by an organic link module inside the mecha that can be transferred to another unit if the technician knows where the control module is located. Due to the unique bio-organic nature of these Zentraedi mecha, the control module will only work in them.

The control module for these costs 25 CP, has 2 Kills and takes up 1 space.

Ether Shield System

Experimental system designed by study of ether waves emitted by slain Protodeviln. This shield draws energy from the "astral world" (the energy sub-dimension the Protodeviln beings are from) to create a physical barrier in the "real world". The shield is believed to be able to endure even the beam from a heavy particle beam cannon such as those carried by New Macross Class variable carriers.

This system is only installed in the Queadluun-Alma, designed for fleet commanders and possibly elite "Protodeviln hunter" cadres. The system itself mimics the Protodeviln ability to generate an omnidirectional barrier that can shrug off every type of attack, including spiritia attacks. It counts as a SP 20, +0 DA force field with "surge" (10K) offensive capability. It can deflect attacks up to 500K, but will be knocked out for 2d10 rounds; and it can deflect attacks over this, such as a heavy particle beam, but the system will be fused on a 1-3 (d10) or knocked out for 5d6 rounds otherwise.

Zentraedi Mecha

Zentran Mecha: Regult Tactical Pod, Regult Gluuhaug Pod, Regult Serauhaug Pod, Del Regult Pod, Zer Regult, Nousjadeul-Ger Power Armor, Glaug Officer Pod, Raulon-Ve Fighter Pod, Exa-Glaug Officer Pod, Gilouza-Fre Officer Pod, Logran Low Power Armor, Reglemo-Ger Power Armor, Queadluun-Ger, Queadluun-Yau, Nousjadeul-Ger Officer Power Armor, Recovery Drone

Meltran Mecha: Queadluun-Rau Power Armor, Queadluun-Oquilla Power Armor, Queadluun-Nona Power Armor, Cigno-Mul Power Armor, Shellcair-Gar Power Armor, Magzemig-La Power Armor, Queadlunn-Alma

Special Mecha & Drones: Migg Pitt, Automatic Attack Drone, Automatic Heavy Weapons Platform Drone

Cigno-Mul

In 2036, the Neld Space Fleets attacked the U.N. Spacy. When the fleet split into two, several squadrons of Meltrandi Power Armor attacked the orbiting Factory Satellite. The Cigno-Mul was primarily stationed around the ships as escorts and when encountered, preferred to snipe at long range with their beam cannons.

In 2037 when the Leplendis Space Fleet arrived, the Cigno-Mul was encountered again in even greater numbers. These units acted as defensive perimeters around all ships. They also formed into strike groups designed to go after, and destroy U.N. Spacy ships. Again the favored tactic of the Cigno-Mul was to snipe at long range with the beam cannons.

Esbeliben Regult Series

The Regult pod can be easily described as a beer can on stilts. Regults have little armor, weak thrusters and only the most basic sensors and weapons systems. Approximately 1 in 12 Regult have a pair of missile pods (SRM or LRM) attached on the top for additional firepower. For reconnaissance purpose, the top-mounted weapons can be replaced with a low-grade sensor suite. The Regult's only combat advantage lies in their overwhelming numbers. The Regult uses manual controls for the legs, and is more tiring than running without a pod.

The Regult has five main variations:

Regult – armed with anti-aircraft lasers
Gluuhaug Regult – armed with 24 light assault missiles
Serauhaug Regult – armed with 4 heavy assault missiles
Del Regult – has no weapons, but has increased sensors and communications.
Zer Regult – armed with one heavier beam gun, replace anti-air guns with missile rack

Exa-Glaug Officer Pod

The Exa-Glaug is an upgraded form of the more typical Glaug. The Exa-Glaug was first encountered shortly after Space War I when rouge Zentran fleets began to enter the solar system. Whereas the standard Glaug has been dwindling in numbers, the Exa-Glaug has been more frequently encountered. The Exa-Glaug typically leads a squadron of battle pods. Many of these units were also encountered in 2037 when the Burado fleet entered the Solar System.

Flemenmik Nousjadeul-Ger

This is the Zentraedi power armor, donned much like putting on a jumpsuit. The suit essentially provides a Zentraedi soldier with mobility and a couple of weapon systems for fighting in a zero-G environment. The Nousjadeul-Ger is a weak equivalent to the Meltrandi Queadluun-Rau, designed mostly for heavy infantry. Note that since it is worn like a jumpsuit, destroying a limb of the mecha will quite likely also take the pilot's limb with it.

Flemenmik Nousjadeul-Ger Officer Power Armor

The Male Power armor was the primary mecha of the Zentraedi's Air Mobile Calvary. With its limited flight capabilities, the Male Power amour could be released from high orbit fighting its way to the surface. Upon reaching the surface, battalions of

Male Power armors would entrench and hold any ground until reinforcements of Battle Pods landed. As the war against the Inspection Army proceeded, the Protoculture came to the realization that command personnel for the Air Mobile Calvary were increasingly coming under fire from the planetary and mecha defenses. They decided that a new more advanced Officers Power Armor with increased sensor and amour capabilities was needed for their elite troops.

The Officer Power armor takes much from its predecessor, as the basic body shape remains the same. However, the forward impact cannon, which was largely ineffective, was removed. The weight saved was thus devoted to increased amour and the addition three more powerful plasma shock expansion thrusters, producing 33% more thrust. The only mounted weapon was the new PB-11, able to fire larger energy bursts at a higher rate of fire over the older PB-10 design found on the Male Power amour. An external pistol version of the Zentraedi Shock rifle was standard complement, as the designers could not bare to have a design with only one range weapon. To help the standard Zentraedi soldier distinguish between these two types of power armors, the Officer Power armor was colored purple

The Male Power Armor was produced only in limited qualities at the end of the Stellar Republic, as lack of manufacturing facilities took a toll on the project. Only some 20,000 Officer Power armors were produced. A majority of these never saw combat with the Inspection Army, but instead entered combat for the first time when Boddole Zer attacked earth on June 18, 2011. A majority of these mecha were destroyed during the fight. However, several hundred survived and landed on the Earth's surface.

Gilouza-Fre Officer Pod

The Burado Fleet contained many different variations of Zentradi and Meltrandi mecha. The Officer/Squadron Commander Pod is no exception. This unit has the general appearance of the Glaug Officer Pod. Above and beyond this however, it has fully articulating arm and hand units. This unit also had a more advance sensor package.

These were among the first units to engage the U.N. Spacy near Pluto. Also advanced front-line units were able to penetrate as far in as Earth before they were stopped by forces operating off of the Prometheus II. A particularly bloody exchange happened near Uranus when forces of the Burado fleet led by the Zentraedi, Kamjin Kravshera, encountered the 2nd defensive perimeter. The Minmei attack was proving to be ineffective, and losses from the 2nd Defensive Perimeter were high.

Logran Low Power Armor

When the Burado Fleet arrived in the Solar system in 2036, the U.N. Spacy faced units not unlike the mecha from the Bodolza and Laplamiz fleets. The male power armor was similar to the male power armor of the Bodolza Fleet with a few notable exceptions. Instead of one overhead particle beam, this model had two. Also the back mounted thruster unit was slightly larger making this unit slightly more suited for space borne combat.

The male power armor was one of the front-line units encountered by the U.N. Spacy forces. The Burado Fleet had almost as many as they had battle pods. Initially, losses to this unit were quite high, and would have been considerable had not the

"Minmei Attack" not been so effective. Caution should be exercised if these units are ever encountered in the future.

Magzemig-Rau

Perhaps the most deadly Meltran power armor, the Magzemig-Rau is thankfully a very rare unit. First encountered in 2036 when the Neld Fleet invaded the Solar System, the Magzemig-Rau proved to be a lethal opponent. This unit has a unique weapons system that few other Zentraedi mecha have, Automated Attack Drones. These are fully automated drones that fly along side the Magzemig-Rau and take targeting queue from the pilot, then attack independent of the larger mecha unit. This unit was developed very late in the Stellar Republic, its production has been curtailed sharply due to concentrated Inspection Army attacks. Typically only the top aces in a fleet have this unit, making it nearly unique in a fleet of millions.

Migg Pitt

Developed as the most powerful battlesuit by the ancient Protocultures, the Migg Pitt is a colossal construct. Designed toward the end of the cataclysmic wars with the Inspection Army and the Protodeviln, the Migg Pitt was designed to augment Zentraedi soldiers so that they could attack and destroy the Evil Series Zentraedi.

The Migg Pitt towers over every other Variable fighter and destroid mecha ever encountered or produced. A full sized Zentran/Meltran warrior sits in a cockpit at the top of the unit. Starship scale laser cannons and immense arrays of missiles round out the offensive weaponry. The Migg Pitt also has an interesting feature in that a full sized Gluuhaug Regult in enclosed in its structure and acts as an escape pod for the pilot if the Migg Pitt takes too much damage.

The first Migg Pitt was encountered in 2036 when Kamjin sent encoded transmissions to the orbiting Factory Satellite. The automated systems began constructing the Migg Pitt in one of the unexplored factory arms. Kamjin was then able to sneak aboard and gain access to the Migg Pitt. The next time the Migg Pitt was encountered was one year later when the Burado fleet invaded. This time Kamjin had several produced and stockpile aboard the Burado Fleet Command Base.

As these mecha are specifically designed to attack and destroy Protodeviln and Evil Series Zentraedi, extreme caution should be taken when engaging these units.

Raulon-Ve Fighter Pod

The Raulon-Ve is an armored rocket sled/shuttle that the Zentraedi pilot lays down in to fly. The Raulon-Ve is the Zentraedi's fastest and most agile mecha scale vehicle, being almost the equivalent of the VF-1 in speed and maneuvering.

Recovery Pod

This is an unarmed pod for recovering salvageable mecha and pilots as well as sealing hull breeches.

Reglemo-Ger Power Armor

One of the more advanced Male Power Armor units encountered, the Reglemo-Ger was given the designation as a Heavy Artillery Power Armor due to its stores of

heavy missiles. This unit was first encountered off the South American coast of Argentina when the rogue Gleg Fleet invaded the Sol System. Numerous units were guarding the secret base the Zentradi had established in the caves along the coastline. The unit is larger than any other male power armor and is slightly larger than the Meltrandi Queadluun-Rau. The Zentran pilot sits in the central section with his arms and legs. The left shoulder of the Power Armor has a large Particle Beam cannon, and the right has a Heavy Missile battery. The arms are quite long and rather spindly, but are capable of carrying any sort of Zentradi or Meltrandi style weapon.

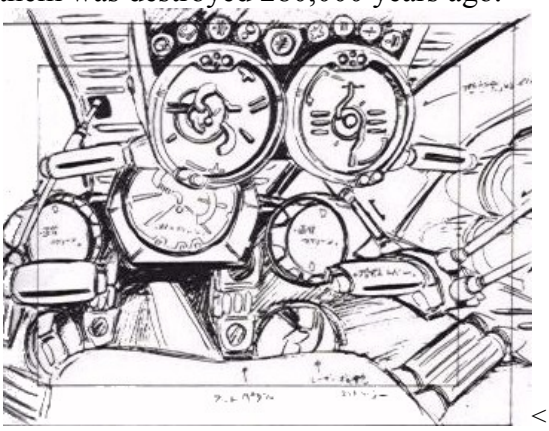
Resoquomi Heavy Command Pod

During the brief skirmishes with the Gleg Zentradi/Meltrandi fleet, many previously unseen units participated in the attacks against U.N. Spacey. In the initial stages of the invasion, this Heavy Command Pod coordinated the attacks of numerous automated units and manned units in and around the Debris Belt orbiting Earth.

The Command Pod bears a passing resemblance to the Officers pod with attached boosters. The Command Pod is however much larger. Twice as large in fact. It has a dual cockpit, for one pilot/gunner, and a second command and control officer/gunner. There are two weapon arms similar to that of the Officer's Pod, as well as an overhead cannon. The command pod also features a central laser cannon and a unique gravity wave device, unseen in any other Zentradi/Meltrandi mecha.

Roiquonmi Glaug Officer's Pod

The officers of the Zentraedi and some Meltrandi pilot these units. The Glaug has more weapons, better sensors and thicker armor, giving the pilot a better chance to survive in battle. The Glaug officer pod may also be mounted into a heavily armored rocket sled for increased speed and protection, as well as trans-atmospheric capability. The Glaug is one of the more rare of Zentraedi mecha due to the automated satellite factory that built them was destroyed 280,000 years ago.



< Glaug cockpit

Queadluun-Alma Meltran Power Armor

One of the high-end models of the Queadluun-series which was designed by Quimeliquola Arsenal during the Stellar Republic dissolution conflict. Although it was considered to have been designed for the fleet commander of the female officers' fleet for the front lines, most of the records were lost so this is not certain.

The super high-maneuverability missile launchers is the similar to the main equipment of the Queadluun-Rau, but the load capacity is 4 times greater due to the enlarged backpack. In addition, the arm pulse laser guns have such a high output that it can penetrate the anti-beam-coated armor on a VF-171 Nightmare Plus, if was equipped with it.

The ether wave emitted by the remains of the Protodeviln, is used through the astral world (the energy sub-dimension the Protodeviln life forms originated from) and the system to create a physical force field barrier is incorporated which could theoretically endue a direct hit from a Macross Cannon. It is unknown whether or not this inherent feature was originally provided in this system.

Queadluun-Ger Tactical Power Armor

With the development of the Officer Power Armor and the Queadluun-Rau Power Armor, the Protoculture decided that the ultimate power armor was still needed. The Officer Power armor had greater armor protection than the Queadluun-Rau and had more powerful beam weaponry. While the Queadluun-Rau possessed the advanced Inertial control system and high missile load. What was needed was a command mecha that could fight anything that the Invid or the newly rebellious Disciples of Zor possessed. Hence the Queadluun-Ger or the Tactical Power armor was developed.

The Tactical Power armor takes much from its predecessors, as the basic body shape remains the same as the Officer power armor; however, roughly 50% of the armor protection was added. Two plasma shock thrusters, identical to the three mounted on the female power armor were added. Because of the increased armor weight of the mecha the acceleration in space or the maximum speed in the atmosphere is much less than that of the female or officer power armor. The top mounted highly effective PB-11 was kept. The largest addition to the firepower of the Tactical Power Armor is the four missile launchers added to the primary weapon systems. Two SL-21a missile systems from the female power armor were added on the back shoulders of the mecha along with two SL-9c missile launchers on either arm. This gave the Tactical Power Armor 102 Glatrlan Diqhaug micromissiles.

The Tactical Power Armor never made it past the experimental stage. Only 1,000 units were produced and tested in the elite units of the Stellar Republic. Most of these units were destroyed in the numerous fights with the Protodeviln at the end of the Stellar Republic's reign. However, some 50 units were transferred to Vrlitwhai's recovery fleet. All of these units were destroyed during the subsequent battles with the SDF-1 or in the final attack with Boddole Zer above Earth on June 18, 2011.

Queadluun-Nona Meltran Power Armor

Laplamiz Fleet Meltrandi power armor come in two variants. One type is the Queadluun-Rau, and is the standard issue for officers and Aces. Another unit, the Queadluun-Nona, is a similar unit, that lacks one of the backpack mounted missile pods, in exchange for higher maneuverability and distance. This unit is usually given to lower ranking pilots, or in special missions that require slightly higher speed or endurance.

The only time this unit was encountered in combat was when the Laplamiz Fleet de-folded in earth space and attacked the Boddole Zer Zentraedi forces. Pilots from the

SDF-1 engaged several units. After the conclusion of Space War I, these units, like all other Zentran/Meltran units, were studied extensively.

Queadluun-Oquilla Meltran Power Armor

The Queadluun-Oquilla is a unique variation of the basic Queadluun-Rau modified by Emiria Jenius. The Oquilla possesses more powerful thrusters, upgraded controls, and colored smoke projectors. This was a unique mecha, much like Basara's VF-19 Kai. Emiria's mecha was destroyed on Veil when she caused Natter Valgo to carve a channel through the mountains to save a mining town on the planet Veil (see Macross 7: The Galaxy is Calling Me).

Queadluun-Rau Meltran Power Armor

The Queadluun-Rau is the standard unit for Meltrandi troops. Unlike most Zentraedi units, the Meltrandi power armor is stepped into much like donning a jumpsuit. The Queadluun-Rau has more weapons and much better armor than Zentraedi mecha, as well as the inertial dampening system that makes it highly maneuverable. Note that since it is worn like a jumpsuit, destroying a limb of the mecha will quite likely also take the pilot's limb with it.

Queadluun-Rau Meltran Power Armor – Chlore Type

Chlore, commander of a large rogue Meltrandi fleet encountered by the Macross 7 fleet, possesses a gold painted custom Queadluun-Rau. She has it customized to be faster and more maneuverable. Since Meltrandi have no mechanical skills, it is questionable where it was worked on, unless there is a Zentraedi automated factory that has templates to build or upgrade such a mecha for fleet commanders and ace pilots.

Queadluun-Yau Assault Power Armor

The development of the Queadluun-Ger (Tactical Power Armor) power armor provided the male Zentraedi an equivalent counterpart to the highly successful Queadluun-Rau. The Protoculture looked at other ways to improve the standard male power armor to fill other tactical requirements. One design improvement was to produce a highly mobile cavalry unit which could be quickly deployed to key areas of the battlefield or used for special operations.

The Assault Power Armor (Queadluun-Yau) was developed 5 years after the Tactical Power Armor to fulfill these needs. Although, the Assault Armor does not have nearly the armor nor the firepower of the standard Tactical Power Armor, it still outclasses the standard Male Power Armor. The highly successful PB-11 was kept as the primary long range weapon; however, the missile load was reduced to 42 short range missiles mounted in two SL-21 launchers on either shoulder. Two carbine versions of the venerable PB-10, found on all combat models of the Regult Battle Pod, were added to either arm for short range defense.

The Queadluun Yau never made it past the experimental stage. Only 250 models were produced immediately before the Zentraedi campaign to recapture the SDF-1. Approximately 50 Assault Armors were included in Vrlitwhai's forces to reclaim the SDF-1. The Boddole Zer felt that the special operations nature of the mission would fit in with the design parameters of the Assault Armor.

Shellcair-Gar

This unit was first observed in 2036 when the Neld Space Fleet invaded the Solar System. In the Neld combined Meltran/Zentran fleet, these units were very sparse and functioned as a space attack unit. Several of these were encountered by UN Spacy. As had been previously observed, the Meltrandi power armor was considerably more powerful then the Zentradi counterpart. There were also relatively fewer of them.

In 2037, the Leplendis and Burado Space Fleets attacked the U.N. Spacy. The Leplendis Fleet was a rouge Meltrandi fleet that had wondered the galaxy for many eons. The most common unit in the Leplendis fleet was the standard Queadluun-Rau unit. The Shellcair-Gar unit was relatively rare. It was used mainly in the larger squadrons as a mainline attack unit.

The Neld fleet was eventually destroyed by the "Minmei Attack", but the Leplendis Fleet escaped by folding out during an attack. With the Leplendis fleet aware of the location of Earth and its resources, and with their immense fleet still mostly intact, it is only a matter of time before these units are encountered again.

Taug Artillery Pod

First encountered when the Gleg Fleet invaded the Solar System, this unit was similar to the Glaug Officer Pod. It does not have legs, but instead has two fixed aft thruster pods where the legs on a Glaug would attach. The main weapon system is a heavy artillery cannon mounted on the top of the Taug. Similar in configuration to the Monster 40cm cannons, this heavy cannon can fire projectiles that inflict heavy damage. Taug units were encountered in moderate numbers when the UN Spacy fleet attacked the Gleg Command Base.

Waroster Heavy Command Pod

During the brief skirmishes with the Gleg Zentradi /Meltrandi fleet, many previously unseen units participated in the attacks against U.N. Spacy. The Waroster Pod was first encountered aboard a Zentradi Scout Ship hiding in the Antarctic Waste. When UN Spacy variable fighters attacked the ship, it began to take off and ascend into orbit. The Waroster was the Command unit leading the counter attack onboard the Scout Ship.

This unit has a unique look not seen in other Zentran Battle Pods. Its weaponry consists of two arm mounted laser cannons, a heavy laser cannon on the head, and a missile battery in the tail. It has been noted that this unit has a slight bird-like appearance, however when this unit was encountered, it was exceptionally dangerous.

Zentran Mecha

Raulon-Ve Fighter Pod

COST: 54 CP (+26 CP for missiles)
Availability: since before 500,000 BC to 20XX

HEIGHT:
?
WIDTH:

?

LENGTH:

17.37m

WEIGHT:

?

Mode	MV	Land MA	Fly MA
Battle Pod	-2	0	16

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	10	MS/Ab	4	4

Thrusters	Location	MA
Thruster	Torso	6
Thruster	Torso	6
Thruster	Torso	6

Sensors	Location	Kills	Sensors	Communications
LW	Torso	1	3 km	500 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Tri-barrel Laser	Torso	2	12	+0	2	U	BV 3
Missile Rack	Torso	10	2080	+0	6	9	Linked
Missile Rack	Torso	10	2080	+0	6	9	Linked

Optional Systems

Nightsight, Spotlight, Combat Computer

Multipliers

Environmentals (Space), Verniers (5 main body), Weight Inefficient, Transatmospheric Ability

Esbeliben Regult Tactical Pod

COST: 106 CP

Availability: since before 500,000 BC to 20XX

HEIGHT:

15.12m
18.67m light missile
19.12m heavy missile

WIDTH:

9.86m light missile
8m heavy missile

LENGTH:

8.2m light missile
8.3m heavy missile

WEIGHT:

37,000 kg
39,600 kg light missile
41,000 kg light missile

Mode	MV	Land MA	Fly MA
Battle Pod	-2	10 (500m/round)	20 (1000m/round)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	MS/Ab	4	4
Right Leg		STR	4	6	STR/Ab	3	3
Left Leg		STR	4	6	STR/Ab	3	3

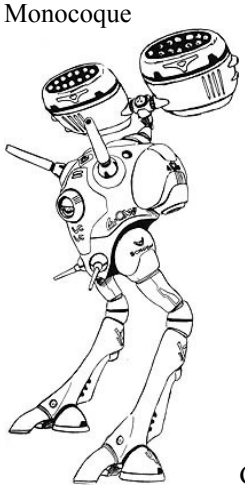
Thrusters	Location	MA
Thruster	Torso	10
Thruster	Torso	10

Sensors	Location	Kills	Sensors	Communications
LW	Torso	1	3 km	500 km

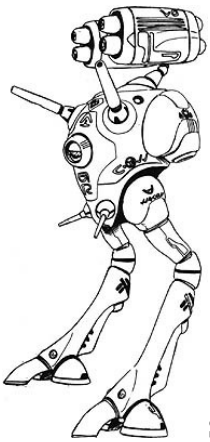
Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Beam Gun	Torso	3K	24	+0	3	U	Linked
Beam Gun	Torso	3K	24	+0	3	U	Linked
Anti-Air Laser	Torso	1K	24	+0	1	U	BV2, Link, Phalanx Vari
Anti-Air Laser	Torso	1K	24	+0	1	U	BV2, Link, Phalanx Vari
Autocannon	Torso	1K	12	+0	1	-	BV2, Anti-Personnel, Link
Autocannon	Torso	1K	12	+0	1	-	BV2, Anti-Personnel, Link
Ammo					3	80	

Optional Systems
Nightsight, Spotlight, Combat Computer

Multipliers
Environmentals (Space), Verniers (3 Main Body, 1 each Leg), Battle Pod Leg Servos, Weight Inefficient Monocoque



Gluuhaug Regult



Serauhaug Regult

Notes: The anti-aircraft lasers can be removed and replaced with one of the following options:
Gluuhaug Regult: Light Missile Rack: +1.5 CP, +2,100 kg
STR Pod with STR/Ab armor (3K, SP3), 24 light assault missiles (+0 WA, 3K, Range 32, 5K)
Serauhaug Regult: Heavy Missile Rack: -13.5 CP, +4,000 kg
LW Pod with STR/Ab armor (3K, SP3), 4 heavy assault missiles (+0 WA, 7K, Range 32, 2K)

Ectromelia Del Regult Tactical Scout Pod

COST: 70 CP

Availability: since before 500,000 BC to 20XX

HEIGHT:
18.2m
WIDTH:
12.6m
LENGTH:
7.6m
WEIGHT:
39,800 kg

Mode	MV	Land MA	Fly MA
Battle Pod	-2	10 (500m/round)	20 (1000m/round)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	MS/Ab	4	4
Right Leg		MS	4	6	STR/Ab	3	3
Left Leg		MS	4	6	STR/Ab	3	3
Pod		STR		6	STR/Ab	3	3

Thrusters	Location	MA
Thruster	Torso	10
Thruster	Torso	10

Sensors	Location	Kills	Sensors	Communications
LW	Torso	1	3 km	500 km
MS	Pod	2	7 km	1000 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
None							

Optional Systems
Nightsight, Spotlight, Combat Computer, Advanced Sensors

Multipliers
Environmentals (Space), Verniers (3 Main Body, 1 each Leg), Battle Pod Leg Servos, Weight Inefficient Monocoque

Zer Regult

COST: 81 CP (+36 CP for missiles)
Availability: since before 500,000 BC to 20XX

HEIGHT:
17.4 m
WIDTH:
8.0 m
LENGTH:
8.3 m
WEIGHT:
38,000 kg

Mode	MV	Land MA	Fly MA
Battle Pod	-2	10 (500m/round)	20 (1000m/round)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	MS/Ab	4	4
Right Leg		STR	4	6	STR/Ab	3	3
Left Leg		STR	4	6	STR/Ab	3	3

Thrusters	Location	MA
Thruster	Torso	10
Thruster	Torso	10

Sensors	Location	Kills	Sensor	Communications
LW	Torso	1	3 km	500 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Beam Gun	Torso	3K	24	+0	3	U	
Large Cannon	Torso	4K	24	+1	4	U	
Autocannon	Torso	1K	12	+0	1	-	BV2, Anti-Personnel, Link
Autocannon	Torso	1K	12	+0	1	-	BV2, Anti-Personnel, Link
Ammo					3		
Missile Rack	Torso	5K	32	-1	2	6	Blast 1

Optional Systems
Nightsight, Spotlight, Combat Computer

Multipliers
Environmentals (Space), Verniers (3 Main Body, 1 each Leg), Battle Pod Leg Servos, Weight Inefficient Monocoque

Notes: Designed as an advanced Regult multi-purpose combat battlepod.

Roiquonmi Glaug Officer's Pod

COST: 296 CP (+4.2 CP for missiles)
Availability: since before 500,000 BC to approximately 278,000 BC

HEIGHT:
16.55m
WIDTH:
11.4m
LENGTH:
12.66m
WEIGHT:
41,200 kg

Mode	MV	Land MA	Fly MA
Battle Pod	-3	14 (700m/round)	20 (1000m/round)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		LW	12	18	LW/Ab	6	6
Right Leg		MS	5	8	MS/Ab	4	4
Left Leg		MS	5	8	MS/Ab	4	4
Right Arm		MS	5	8	MS/Ab	4	4

Left Arm	MS	5	8	MS/Ab	4	4

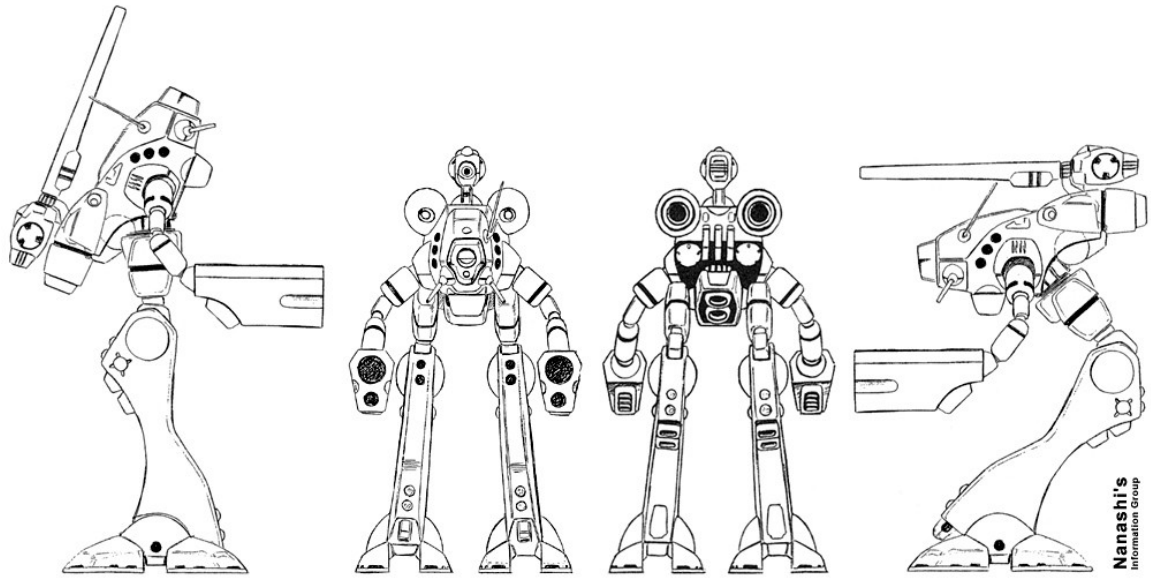
Thrusters	**Location**	**MA**
Thruster	Torso	10
Thruster	Torso	10

Sensors	**Location**	**Kills**	**Sensors**	**Communications**
HS	Torso	2	20 km	1800 km

Weapon	**Location**	**DMG**	**Range**	**WA**	**Kills**	**Shots**	**Notes**
Particle Cannon	Weapon Mount	7K	64	+1	7	U	Warmup 1
Large Cannon	Right Arm	4K	24	+1	4	U	Linked
Large Cannon	Left Arm	4K	24	+1	4	U	Linked
Small Cannon	Right Arm	2K	24	+1	2	U	Linked
Small Cannon	Left Arm	2K	24	+1	2	U	Linked
Anti-Pers. Laser	Torso	1K	24	+0	1	U	BV3, Anti-Personnel, Link
Anti-Pers. Laser	Torso	1K	24	+0	1	U	BV3, Anti-Personnel, Link
Missile Launcher	Torso	3K	32	-1	1	3	Linked
Missile Launcher	Torso	3K	32	-1	1	3	Linked

Optional Systems
Nightsight, Spotlight, Combat Computer, Weapon Mount, Manipulator Arms (x2)

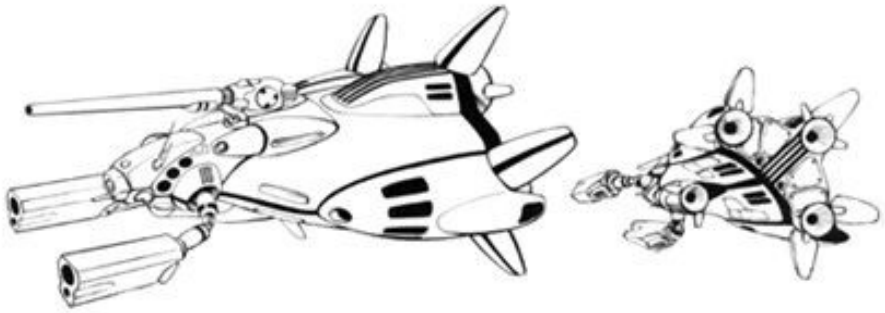
Multipliers
Environmentals (Space), Verniers (3 Main Body, 1 each Leg), Battle Pod Leg Servos
Monocoque



Notes: 280,000 years ago, the factory producing this mecha was destroyed.

Glaug Eldare Armored Vehicle

COST: 504 CP (+4.2 CP for missiles)
Availability: since before 500,000 BC to approximately 278,000 BC



HEIGHT:
10.2m
WIDTH:
16.2m
LENGTH:
14.44m
20.4m with Glaug
WEIGHT:
40,600 kg
81,800 kg with Glaug

Mode	MV	Land MA		Fly MA
Battle Pod		-3	0	38 (1900m/round)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		LW	12	12	LW/Ab	6	6
Right Arm		MS	5	5	MS/Ab	4	4
Left Arm		MS	5	5	MS/Ab	4	4
Armored Sled		MS	-	10	MS	4	4

Thrusters	Location	MA
Thruster	Armored Sled	10
Thruster	Armored Sled	10
Thruster	Armored Sled	10
Thruster	Armored Sled	8

Sensors	Location	Kills	Sensors	Communications
HS	Torso	2	20 km	1800 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Particle Cannon	Weapon Mount	7K	64	+1	7	U	Warmup 1
Large Cannon	Right Arm	4K	24	+1	4	U	Linked
Large Cannon	Left Arm	4K	24	+1	4	U	Linked
Small Cannon	Right Arm	2K	24	+1	2	U	Linked
Small Cannon	Left Arm	2K	24	+1	2	U	Linked
Anti-Pers. Laser	Torso	1K	24	+0	1	U	BV3, Anti-Personnel, Link
Anti-Pers. Laser	Torso	1K	24	+0	1	U	BV3, Anti-Personnel, Link
Missile Launcher	Torso	3K	32	-1	1	3	Linked
Missile Launcher	Torso	3K	32	-1	1	3	Linked

Optional Systems
Nightsight, Spotlight, Combat Computer, Weapon Mount

Multipliers
Environmentals (Space), Verniers (3 Main Body, 7 Rocket Sled)

Notes: To enhance the capabilities of the Glaug command battle pod in aerospace and space-borne missions, where the danger of long-range guided missile attack was far larger than planetside, the Eldare armored vehicle was designed and built in conjunction with the Glaug pod. The aim was to increase the survivability and fighting power of the Glaug by enhancing maneuverability and acceleration, as well as adding a more appropriate (to space) armament. The legs of a Glaug officer's pod are removed, and the chassis is bolted into a well armored rocket sled.

Exa-Glaug Officer's Pod

COST: 306 CP (+4.2 CP for missiles)
Availability: since before 500,000 BC to 20XX

HEIGHT:
16.55m
WIDTH:
11.4m
LENGTH:
12.66m
WEIGHT:
43,200 kg

Mode	MV	Land MA	Fly MA
Battle Pod	-3	14 (700m/round)	20 (1000m/round) (mach 2)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	HS/Ab	5	5
Right Leg		HS	5	8	MS/Ab	4	4
Left Leg		HS	5	8	MS/Ab	4	4
Right Arm		HS	5	8	MS/Ab	4	4
Left Arm		HS	5	8	MS/Ab	4	4

Thrusters	Location	MA
Thruster	Torso	15
Thruster	Torso	15

Sensors	Location	Kills	Sensors	Communications
LH	Torso	2	20 km	1800 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Particle Cannon	Weapon Mount	7K	64	+1	7	U	Warmup 1
Large Cannon	Right Arm	4K	24	+1	4	U	Linked
Large Cannon	Left Arm	4K	24	+1	4	U	Linked
Small Cannon	Right Arm	2K	24	+1	2	U	Linked
Small Cannon	Left Arm	2K	24	+1	2	U	Linked
Anti-Pers. Laser	Torso	1K	24	+0	1	U	BV3, Anti-Personnel, Link
Anti-Pers. Laser	Torso	1K	24	+0	1	U	BV3, Anti-Personnel, Link
Missile Launcher	Right Leg	3K	32	-1	1	3	Linked

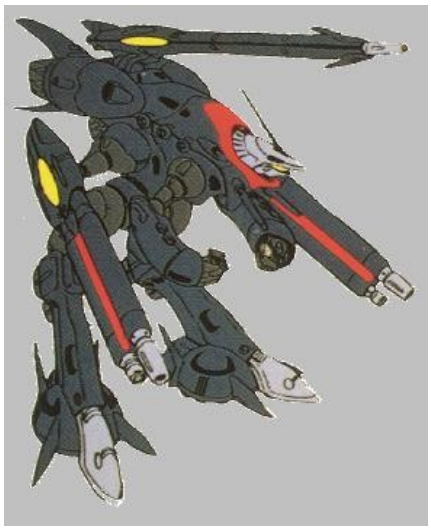
Missile Launcher Left Leg	3K	32	-1	1	3	Linked

Optional Systems
Nightsight, Spotlight, Combat Computer, Weapon Mount, Utility Arms (2)

Multipliers
Environmentals (Space), Verniers (3 Main Body, 1 each Leg), Battle Pod Leg Servos

Notes: No official dimensions or mass was listed, so I approximated them from the base Glaug it is derived from.

Gilouza-Fre Officer's Pod



COST: 279 CP (+4.2 CP for missiles)
Availability: since before 500,000 BC to 20XX

HEIGHT:
16.55m
WIDTH:
11.4m
LENGTH:
12.66m
WEIGHT:
43,200 kg

Mode	MV	Land MA	Fly MA
Battle Pod	-3	14 (700m/round)	20 (1000m/round) (mach 2)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	HS/Ab	5	5
Right Leg		MS	5	8	MS/Ab	4	4
Left Leg		MS	5	8	MS/Ab	4	4
Right Arm		MS	5	8	MS/Ab	4	4
Left Arm		MS	5	8	MS/Ab	4	4
Right Sm. Arm		STR	3	5	STR/Ab	3	3
Left Sm. Arm		STR	3	5	STR/Ab	3	3

Thrusters	Location	MA
Thruster	Torso	10
Thruster	Torso	10

Sensors	Location	Kills	Sensors	Communications
LH	Torso	1	20 km	1800 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Small Arms	1K	Melee	+0	1	U	Quick, Handy
Particle Cannon	Weapon Mount	7K	64	+1	7	U	Warmup 1
Large Cannon	Right Arm	4K	24	+1	4	U	Linked
Large Cannon	Left Arm	4K	24	+1	4	U	Linked
Small Cannon	Right Arm	2K	24	+1	2	U	Linked
Small Cannon	Left Arm	2K	24	+1	2	U	Linked
Anti-Pers. Laser	Torso	1K	24	+0	1	U	BV3, Anti-Personnel, Link
Anti-Pers. Laser	Torso	1K	24	+0	1	U	BV3, Anti-Personnel, Link

Missile Launcher Right Leg	3K	32	-1	1	3	Linked
Missile Launcher Left Leg	3K	32	-1	1	3	Linked

Optional Systems
Nightsight, Spotlight, Combat Computer, Weapon Mount, Utility Arms (2)

Multipliers
Environmentals (Space), Verniers (3 Main Body, 1 each Leg), Battle Pod Leg Servos
Monocoque

Notes: No official dimensions or mass was listed, so I approximated them from the base Glaug it is derived from.

Nousjadeul-Ger Power Armor

COST: 128 CP
Availability: since before 500,000 BC to 20XX

HEIGHT:
16.4m
WIDTH:
11.8m
LENGTH:
8.4m
WEIGHT:
35,400 kg

Mode	MV	Land MA	Fly MA
Power Armor	-1	5 (250m/round)	14 (700m/round)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	HS/Ab	5	5
Head		MS	4	6	MS/Ab	4	4
Right Leg		MS	5	8	MS/Ab	4	4
Left Leg		MS	5	8	MS/Ab	4	4
Right Arm		MS	5	8	MS/Ab	4	4
Left Arm		MS	5	8	MS/Ab	4	4

Thrusters	Location	MA
Thruster	Torso	7
Thruster	Torso	7

Sensors	Location	Kills	Sensors	Communications
MS	Torso	1	7 km	1000 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	1K	Melee	+0	1	U	Quick, Handy
Plasma Cannon	Weapon Mount	6K	32	+0	6	U	Warmup 1
Impact Cannon	Torso	3K	24	+1	2	U	
Laser Pistol	1-Handed	1K	24	+1	1	15	BV3, All Purpose

Optional Systems
Nightsight, Spotlight, Combat Computer, Weapon Mount

Multipliers
Environmentals (Space), Verniers (3 Main Body, 1 each Leg), Monocoque

Nousjadeul-Ger Officer's Power Armor

COST: 140 CP
Availability: ??

HEIGHT:
16.4m
WIDTH:
11.8m
LENGTH:
8.4m
WEIGHT:
35,400 kg

Mode	MV	Land MA	Fly MA
Power Armor	-2	5 (250m/round)	18 (900m/round)

Maneuver Pool +33%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	MW/Ab	6	6
Head		MS	4	6	MS/Ab	4	4
Right Leg		MS	5	8	MS/Ab	4	4
Left Leg		MS	5	8	MS/Ab	4	4
Right Arm		MS	5	8	MS/Ab	4	4
Left Arm		MS	5	8	MS/Ab	4	4

Thrusters	Location	MA
Thruster	Torso	9
Thruster	Torso	9

Sensors	Location	Kills	Sensors	Communications
HS	Torso	1	11 km	1300 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	1K	Melee	+0	1	U	Quick, Handy
Plasma Cannon	Weapon Mount	6K	32	+0	6	U	Warmup 1
Laser Pistol	1-Handed	1K	24	+1	1	15	BV3, All Purpose

Optional Systems
Nightsight, Spotlight, Combat Computer, Weapon Mount

Multipliers
Environmentals (Space, Reentry), Verniers (3 Main Body, 1 each Leg), ACE +33%, Monocoque

Note: Has improved thrusters and controls for battalion commanders.

Logran Low Power Armor

COST: 178 CP
Availability: since before 500,000 BC to 20XX

HEIGHT:
16.4m
WIDTH:
11.8m
LENGTH:
8.4m
WEIGHT:
35,400 kg

Mode	MV	Land MA	Fly MA
Power Armor	-1	5 (250m/round)	14 (700m/round)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	HS/Ab	5	5
Head		MS	4	6	MS/Ab	4	4
Right Leg		MS	5	8	MS/Ab	4	4
Left Leg		MS	5	8	MS/Ab	4	4
Right Arm		MS	5	8	MS/Ab	4	4
Left Arm		MS	5	8	MS/Ab	4	4

Thrusters	Location	MA
Thruster	Torso	7
Thruster	Torso	7

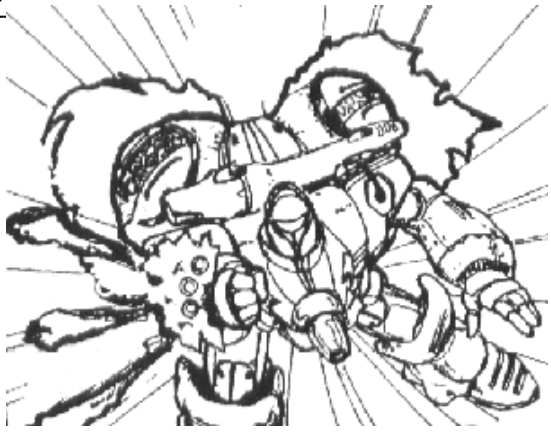
Sensors	Location	Kills	Sensors	Communications
MS	Torso	1	7 km	1000 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	1K	Melee	+0	1	U	Quick, Handy
Particle Cannon	Weapon Mount	7K	64	+1	7	U	Warmup 1
Particle Cannon	Weapon Mount	7K	64	+1	7	U	Warmup 1
Impact Cannon	Torso	3K	24	+1	2	U	
Laser Pistol	1-Handed	1K	24	+1	1	15	BV3, All Purpose

Optional Systems
Nightsight, Spotlight, Combat Computer, Weapon Mount (2)

Multipliers
Environmentals (Space), Verniers (3 Main Body, 1 each Leg), Monocoque

Queadluun-Ger Tactical Power Armor



COST: 381 CP (+120 CP for missiles)
Availability: ??

HEIGHT:
15.5m
WIDTH:
11.8m
LENGTH:
8.4m
WEIGHT:
35,400 kg

Mode	MV	Land MA	Fly MA
Power Armor	-2	5 (250m/round)	30 (1500m/round)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	HS	5	5
Head		MS	4	6	MS	4	4
Right Leg		MS	5	8	MS	4	4
Left Leg		MS	5	8	MS	4	4
Right Arm		MS	5	8	MS	4	4
Left Arm		MS	5	8	MS	4	4
Right Pod		HS		10	HS	5	5
Left Pod		HS		10	HS	5	5

Thrusters	Location	MA
Thruster	Right Pod	15
Thruster	Left Pod	15

Sensors	Location	Kills	Sensors	Communications
MS	Torso	1	7 km	1000 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	1K	Melee	+0	1	U	Quick, Handy
Plasma Cannon	Weapon Mount	6K	32	+0	6	U	Warmup 1
Impact Cannon	Torso	3K	24	+1	2	U	
Laser Pistol	1-Handed	1K	24	+1	1	15	BV3, All Purpose
SRM Rack	Right Arm	4	64	-1	2	9	Blast 1, Crosslinked
Can fire in volleys of up to 3							
SRM Rack	Left Arm	4	64	-1	2	9	Blast 1, Crosslinked
Can fire in volleys of up to 3							
Missile Rack	Right Pod	2K	32	+2	2	42	CMV, Crosslinked
Can fire in volleys of up to 21							
Missile Rack	Left Pod	2K	32	+2	2	42	CMV, Crosslinked
Can fire in volleys of up to 21							

Optional Systems
Nightsight, Spotlight, Combat Computer, Weapon Mount

Multipliers
Environmentals (Space), Verniers (3 Main Body, 1 each Leg)**,**
Monocoque

Queadluun-Yau Assault Power Armor

COST: 280 CP (+188.6 CP for missiles)
Availability: ??

HEIGHT:
14.5m
WIDTH:
11.8m
LENGTH:
8.4m
WEIGHT:
35,400 kg

Mode	MV	Land MA	Fly MA
Power Armor	-2	5 (250m/round)	30 (1500m/round)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	HS	5	5
Right Arm		MS	5	8	HS	5	5
Left Arm		MS	5	8	HS	5	5
Right Leg		MS	5	8	HS	5	5
Left Leg		MS	5	8	HS	5	5
Right Pod		HS		10	HS	5	5
Left Pod		HS		10	HS	5	5

Thrusters	Location	MA
Thruster	Right Pod	15
Thruster	Left Pod	15

Sensors	Location	Kills	Sensors	Communications
MS	Torso	1	7 km	1000 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	1K	Melee	+0	1	U	Quick, Handy
Plasma Cannon	Weapon Mount	6K	32	+0	6	U	
Particle Beam	Right Arm	3K	24	+0	3	U	Linked
Particle Beam	Right Arm	3K	24	+0	3	U	Linked
Particle Beam	Left Arm	3K	24	+0	3	U	Linked
Particle Beam	Left Arm	3K	24	+0	3	U	Linked
Plasma Rifle	2-Handed	2K	20	+1	2	20	BV3
Missile Rack	Right Pod	2K	32	+2	2	42	CMV, Crosslinked
Can fire in volleys of up to 21							
Missile Rack	Left Pod	2K	32	+2	2	42	CMV, Crosslinked
Can fire in volleys of up to 21							

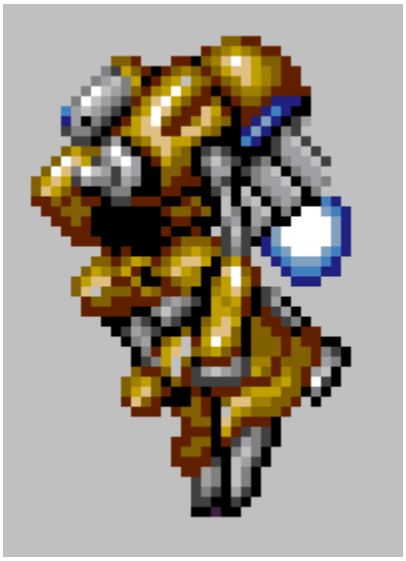
Optional Systems
Nightsight, Spotlight, Combat Computer, Weapon Mount

Multipliers
Environmentals (Space), Verniers (3 Main Body, 1 each Leg), Monocoque

Reglemo-Ger Power Armor

COST: 131 CP (+28 CP for missiles)
Availability: since before 500,000 BC to 20XX

HEIGHT:
19.1m
WIDTH:
18.6m
LENGTH:
11m
WEIGHT:
33,350 kg



Mode	MV	Land MA	Fly MA
Power Armor	-2	5 (250m/round)	28 (1400m/round)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	HS/Ab	5	5
Head		MS	4	6	MS/Ab	4	4
Right Leg		MS	5	8	MS/Ab	4	4
Left Leg		MS	5	8	MS/Ab	4	4
Right Arm		MS	5	8	MS/Ab	4	4
Left Arm		MS	5	8	MS/Ab	4	4

Thrusters	Location	MA
Thruster	Torso	12
Thruster	Torso	12

Sensors	Location	Kills	Sensors	Communications
MS	Torso	1	7 km	1000 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	1K	Melee	+0	1	U	Quick, Handy
Particle Cannon	Left Arm	7K	64	+1	7	U	Warmup 1
Missile Rack	Right Arm	7K	32	-1	10	20	
Can fire volleys of up to 10 missiles							

Optional Systems
Nightsight, Spotlight, Combat Computer, Self Destruct

Multipliers
Environmentals (Space), Verniers (3 Main Body, 1 each Leg), Monocoque

Taug Artillery Pod

COST: 583 CP
Availability: since before 500,000 BC to 20XX

HEIGHT:
11.3m
WIDTH:
11m
LENGTH:
17.6m
WEIGHT:
41,000 kg

Mode	MV	Land MA	Fly MA	
Battle Pod		-3	--	28 (1400m/round)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		LH	12	18	LH/Ab	6	6
Right Arm		MS	5	8	MS/Ab	4	4
Left Arm		MS	5	8	MS/Ab	4	4
Pod		HS		10	LH/Ab	6	6

Thrusters	Location	MA
Thruster	Pod	28

Sensors	Location	Kills	Sensors	Communications
LH	Torso	2	20 km	1800 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Particle Cannon	Right Arm	7K	64	+1	7	U	BV2, Crosslinked
Particle Cannon	Left Arm	7K	64	+1	7	U	BV2, Crosslinked
Artillery Cannon	Weapon Mount	12K	27^2	+0	12	-	Long Range
Ammo						50	Blast 1

Optional Systems
Nightsight, Spotlight, Combat Computer, Weapon Mount, Utility Arms (x2)

Multipliers
Environmentals (Space, Underwater), Verniers (3 Main Body, 2 Pod)
Monocoque

Notes: No official dimensions or mass was listed, so I approximated them from the base Glaug it is derived from.

Waroster Heavy Command Pod

COST: 957 CP (+58.8 CP for missiles)
Availability: since before 500,000 BC to 20XX

HEIGHT:
25.9m
WIDTH:
17.4m
LENGTH:
54.9m
WEIGHT:
97,200 kg

Mode	MV	Land MA	Fly MA	
Battle Pod		-5	12 (600m/round)	24 (1200m/round)

Maneuver Pool +33%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MgH	22	33	AH/Ab	8	8
Right Leg		MgH	11	17	AH/Ab	8	8
Left Leg		MgH	11	17	AH/Ab	8	8

Right Arm	MgH	11	17	AH/Ab	8	8
Left Arm	MgH	11	17	AH/Ab	8	8
Pod	AH		18	AH/Ab	8	8

Thrusters	**Location**	**MA**
Thruster	Torso	12
Thruster	Torso	12

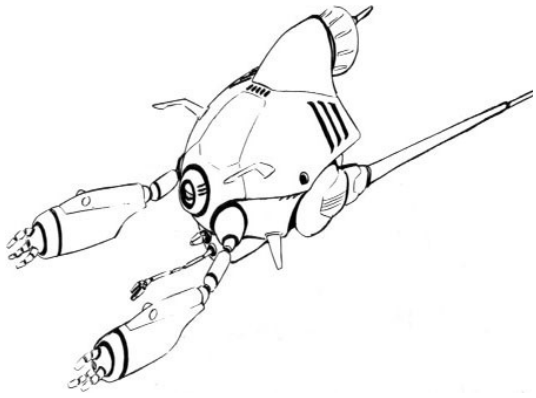
Sensors	**Location**	**Kills**	**Sensors**	**Communications**
HS (excessive)	Torso	1	200 km	18,000 km

Weapon	**Location**	**DMG**	**Range**	**WA**	**Kills**	**Shots**	**Notes**
Particle Cannon	Right Arm	7K	64	+1	7	U	Warmup 1, Crosslinked
Particle Cannon	Left Arm	7K	64	+1	7	U	Warmup 1, Crosslinked
Heavy P-Beam	Torso	20K	180	-1	20	U	Warmup 2
Missile Rack	Pod	7K	32	-1	20	42	

Optional Systems
Nightsight, Spotlight, Combat Computer, Self Destruct, Manipulator Arms (2)

Multipliers
Environmentals (Space, desert, reentry), Verniers (3 Main Body, 5 each Leg, 3 Pod),
Battle Pod Leg Servos, Heavy Hydraulics, Overcharged Engines, Monocoque

Recovery Pod



COST: 89.1 CP
Availability: since before 500,000 BC to 20XX

HEIGHT:
?
WIDTH:
11.4m
LENGTH:
12.66m
WEIGHT:
40,500 kg

Mode	**MV**	**Land MA**	**Fly MA**
Battle Pod	-2	--	20 (1000m/round)

Maneuver Pool +0%

Servo	**Class**	**Kills**	**Spaces**	**Armor**	**SP**	**Kills**
Main Body		LW	12	18	LW/Ab	6	6
Right Arm		MS	5	8	MS/Ab	4	4
Left Arm		MS	5	8	MS/Ab	4	4

Thrusters	**Location**	**MA**
Thruster	Torso	20

Sensors	**Location**	**Kills**	**Sensors**	**Communications**
HS	Torso	2	20 km	1800 km

Weapon	**Location**	**DMG**	**Range**	**WA**	**Kills**	**Shots**	**Notes**
Hands	Arms	1K	Melee	+0	1	U	Quick, Handy

Optional Systems
Nightsight, Spotlight, Manipulator Arms (x2)

Multipliers
Environmentals (Space), Verniers (5 Main Body), Weight Inefficient, Monocoque

Notes: Designed for recovering damaged mecha or attempting field repairs on capital ships.

Meltran Mecha

Cigno-Mul Power Armor
COST: 682 CP (+96.6 CP for missiles)
Availability: since before 500,000 BC to 20XX

HEIGHT:
16.75m
WIDTH:
18.4
LENGTH:
10.8m
WEIGHT:
32,500 kg

Mode	MV	Land MA	Fly MA
Power Armor (2200m/round)	-2	7 (350m/round)	44

Maneuver Pool +167%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	HS	5	5
Right Arm		MS	5	8	HS	5	5
Left Arm		MS	5	8	HS	5	5
Right Leg		MS	5	8	HS	5	5
Left Leg		MS	5	8	HS	5	5
Right Pod		HS		10	HS	5	5
Left Pod		HS		10	HS	5	5

Thrusters	Location	MA
Thruster	Right Pod	22
Thruster	Left Pod	22

Sensors	Location	Kills	Sensors	Communications
LH	Torso	2	20 km	1800 km

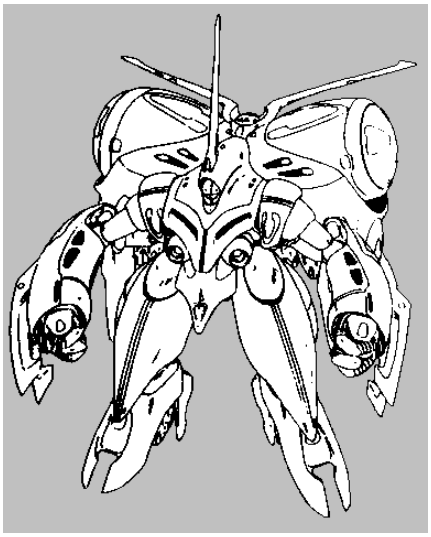
Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	2K	Melee	+0	1	U	Quick, Handy
Beam Cannon	Right Pod	5K	64	+2	5	U	Crosslinked
Beam Cannon	Left Pod	5K	64	+2	5	U	Crosslinked
Impact Cannon	Torso	3K	24	+1	2	U	Linked
Impact Cannon	Torso	3K	24	+1	2	U	Linked
Missile Rack	Right Leg	2K	32	+2	2	21	CMV, Crosslinked
Missile Rack	Left Leg	2K	32	+2	2	21	CMV, Crosslinked

Optional Systems
Nightsight, Spotlight, Combat Computer, Self Destruct, Storage Module

Multipliers
Environmentals (Space), Verniers (5 each Pod, 2 each Leg, 1 Torso)
Reflex Controls, Supercharged Engines, ACE +100%, Monocoque

Notes: The impact cannons always fire together unless one is destroyed.

Magzemig-La Power Armor
COST: 649 CP (+225.4 CP for missiles)
Availability: since before 500,000 BC to 20XX



HEIGHT:
22m
WIDTH:
19.4
LENGTH:
11.3m
WEIGHT:
32,500 kg

Mode	MV	Land MA	Fly MA
Power Armor	-2	7 (350m/round)	44 (2200m/round)

Maneuver Pool +167%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	HS	5	5
Right Arm		HS	5	8	HS	5	5
Left Arm		HS	5	8	HS	5	5
Right Leg		HS	5	8	HS	5	5
Left Leg		HS	5	8	HS	5	5
Right Pod		HS		10	HS	5	5
Left Pod		HS		10	HS	5	5

Thrusters	Location	MA
Thruster	Right Pod	22
Thruster	Left Pod	22

Sensors	Location	Kills	Sensors	Communications
LH	Torso	2	20 km	1800 km

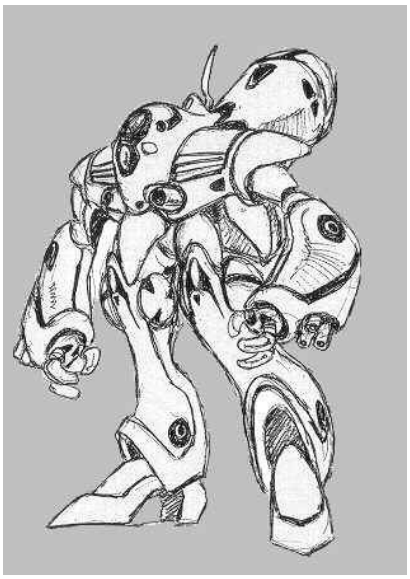
Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	2K	Melee	+0	1	U	Quick, Handy
Vibro Blades	Arms	5K	Melee	+1	5	U	AP, Disrupting
Impact Cannon	Torso	3K	24	+1	2	U	Linked
Impact Cannon	Torso	3K	24	+1	2	U	Linked
Missile Rack	Right Leg	2K	32	+2	2	21	CMV, Crosslinked
Missile Rack	Left Leg	2K	32	+2	2	21	CMV, Crosslinked
Missile Rack	Right Pod	2K	32	+2	3	28	CMV, Crosslinked
Missile Rack	Left Pod	2K	32	+2	3	28	CMV, Crosslinked

Optional Systems
Nightsight, Spotlight, Combat Computer, Self Destruct, AAB Controller, Storage Module

Multipliers
Environmentals (Space), Verniers (5 each Pod, 2 each Leg, 1 Torso)
Reflex Controls, Supercharged Engines, ACE +100%, Monocoque

Notes: The impact cannons always fire together unless one is destroyed.

Queadluun-Nona
COST: 565 CP (+144.9 CP for missiles)
Availability: since before 500,000 BC to 20XX



HEIGHT:
16.75m
WIDTH:
18.4
LENGTH:
10.8m
WEIGHT:
31,800 kg

Mode	MV	Land MA	Fly MA
Power Armor	-2	7 (350m/round)	38 (1900m/round)

Maneuver Pool +167%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	HS	5	5
Right Arm		MS	5	8	HS	5	5
Left Arm		MS	5	8	HS	5	5
Right Leg		MS	5	8	HS	5	5
Left Leg		MS	5	8	HS	5	5
Pod		HS		10	HS	5	5

Thrusters	Location	MA
Thruster	Pod	44

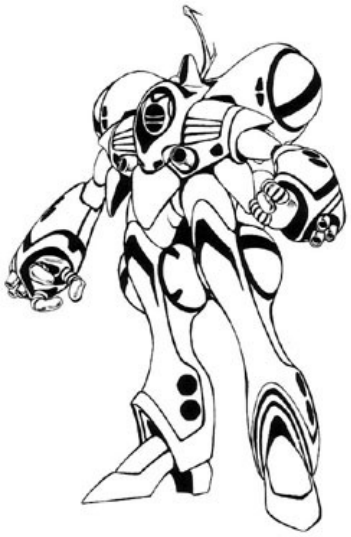
Sensors	Location	Kills	Sensors	Communications
LH	Torso	2	20 km	1800 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	2K	Melee	+0	1	U	Quick, Handy
Impact Cannon	Torso	3K	24	+1	2	U	Linked
Impact Cannon	Torso	3K	24	+1	2	U	Linked
Tri-barrel Laser	Right Arm	2K	12	+1	2	U	BV3, All Purpose, Linked
Tri-barrel Laser	Left Arm	2K	12	+1	2	U	BV3, All Purpose, Linked
Missile Rack	Pod	2K	32	+2	6	21	CMV, Crosslinked
Missile Rack	Right Leg	2K	32	+2	2	21	CMV, Crosslinked
Missile Rack	Left Leg	2K	32	+2	6	21	CMV, Crosslinked

Optional Systems
Nightsight, Spotlight, Combat Computer, Self Destruct, Storage Module

Multipliers
Environmentals (Space), Verniers (4 Pod, 2 each Leg, 1 Torso – efficient space)
Reflex Controls, Supercharged Engines, ACE +100%, Monocoque

Notes: The impact cannons always fire together unless one is destroyed. This one has also been listed as Queadluun-Nna and Queadluun-Na.



Queadluun-Rau
COST: 693 CP (+289.9 CP for missiles)
Availability: since before 500,000 BC to 20XX

HEIGHT:
16.75m
WIDTH:
18.4
LENGTH:
10.8m
WEIGHT:
32,500 kg

Mode	MV	Land MA	Fly MA
Power Armor	-2	7 (350m/round)	44 (2200m/round)

Maneuver Pool +200%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	HS	5	5
Right Arm		MS	5	8	HS	5	5
Left Arm		MS	5	8	HS	5	5
Right Leg		MS	5	8	HS	5	5
Left Leg		MS	5	8	HS	5	5
Right Pod		HS		10	HS	5	5
Left Pod		HS		10	HS	5	5

Thrusters	Location	MA
Thruster	Right Pod	22
Thruster	Left Pod	22

Sensors	Location	Kills	Sensors	Communications
LH	Torso	2	20 km	1800 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	2K	Melee	+0	1	U	Quick, Handy
Impact Cannon	Torso	3K	24	+1	2	U	Linked
Impact Cannon	Torso	3K	24	+1	2	U	Linked
Tri-barrel Laser	Right Arm	2K	12	+1	2	U	BV3, All Purpose, Linked
Tri-barrel Laser	Left Arm	2K	12	+1	2	U	BV3, All Purpose, Linked
Missile Rack	Right Pod	2K	32	+2	6	42	CMV, Crosslinked
Missile Rack	Right Leg	2K	32	+2	2	21	CMV, Crosslinked
Missile Rack	Left Pod	2K	32	+2	6	42	CMV, Crosslinked
Missile Rack	Left Leg	2K	32	+2	2	21	CMV, Crosslinked

Optional Systems
Nightsight, Spotlight, Combat Computer, Self Destruct, Storage Module

Multipliers
Environmentals (Space), Verniers (5 each Pod, 2 each Leg, 1 Torso)
Reflex Controls, Supercharged Engines, ACE +100%, Monocoque

Notes: The impact cannons always fire together unless one is destroyed.

Queadluun-Rau Chlore Custom
COST: 693 CP (+289.9 CP for missiles)
Availability: unique?

HEIGHT:
16.75m
WIDTH:
18.4
LENGTH:
10.8m
WEIGHT:
32,500 kg

Mode	MV	Land MA	Fly MA
Power Armor	-2	7 (350m/round)	52 (2600m/round)

Maneuver Pool +200%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	HS	5	5
Right Arm		MS	5	8	HS	5	5
Left Arm		MS	5	8	HS	5	5
Right Leg		MS	5	8	HS	5	5
Left Leg		MS	5	8	HS	5	5
Right Pod		HS		10	HS	5	5
Left Pod		HS		10	HS	5	5

Thrusters	Location	MA
Thruster	Right Pod	24
Thruster	Left Pod	24

Sensors	Location	Kills	Sensors	Communications
LH	Torso	2	20 km	1800 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	2K	Melee	+0	1	U	Quick, Handy
Impact Cannon	Torso	3K	24	+1	2	U	Linked
Impact Cannon	Torso	3K	24	+1	2	U	Linked
Tri-barrel Laser	Right Arm	2K	12	+1	2	U	BV3, All Purpose, Linked
Tri-barrel Laser	Left Arm	2K	12	+1	2	U	BV3, All Purpose, Linked
Missile Rack	Right Pod	2K	32	+2	6	42	CMV, Crosslinked
Missile Rack	Right Pod	2K	32	+2	2	21	CMV, Crosslinked
Missile Rack	Left Pod	2K	32	+2	6	42	CMV, Crosslinked
Missile Rack	Left Pod	2K	32	+2	2	21	CMV, Crosslinked

Optional Systems
Nightsight, Spotlight, Combat Computer, Self Destruct, Storage Module

Multipliers
Environmentals (Space), Verniers (5 each Pod, 2 each Leg, 1 Torso)
Reflex Controls, Supercharged Engines, ACE +100%, Monocoque

Notes: The impact cannons always fire together unless one is destroyed. No idea what is "custom" other than the gold paintjob.

Shellcair-Gar Power Armor
COST: 837 CP (+55.2 CP for missiles)
Availability: since before 500,000 BC to 20XX

HEIGHT:
18.8m
WIDTH:
18.4
LENGTH:
10.8m
WEIGHT:
32,500 kg

Mode	MV	Land MA	Fly MA
Power Armor	-2	7 (350m/round)	38 (1900m/round) (mach 5)

Maneuver Pool +167%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	15	HS	5	5
Right Arm		MS	5	8	HS	5	5
Left Arm		MS	5	8	HS	5	5
Right Leg		MS	5	8	HS	5	5
Left Leg		MS	5	8	HS	5	5
Right Pod		HS		10	HS	5	5
Left Pod		HS		10	HS	5	5
Right Tendril		MS	4	4	HS	5	5
Left Tendril		MS	4	4	HS	5	5

Thrusters	Location	MA
Thruster	Right Pod	22
Thruster	Left Pod	22

Sensors	Location	Kills	Sensors	Communications
LH	Torso	2	20 km	1800 km

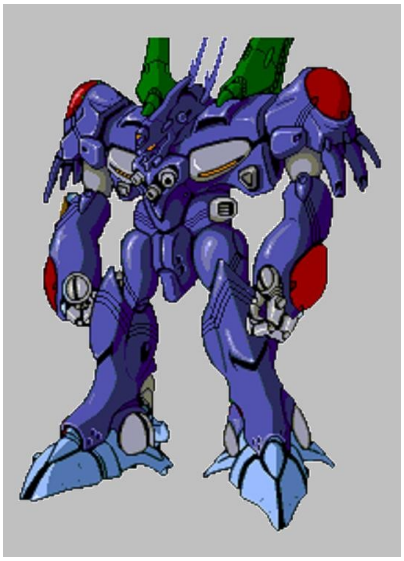
Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Particle Beam	Right Arm	10K	64	+1	10	U	Crosslinked
Particle Beam	Left Arm	10K	64	+1	10	U	Crosslinked
Impact Cannon	Torso	3K	24	+1	2	U	Linked
Impact Cannon	Torso	3K	24	+1	2	U	Linked
Missile Rack	Right Leg	2K	32	+2	2	21	CMV, Crosslinked
Missile Rack	Left Leg	2K	32	+2	2	21	CMV, Crosslinked
Laser Cannon	Right Tendril	5K	32	+2	5	U	Crosslinked
Laser Cannon	Left Tendril	5K	32	+2	5	U	Crosslinked

Optional Systems
Nightsight, Spotlight, Combat Computer, Self Destruct, Storage Module

Multipliers
Environmentals (Space), Verniers (5 each Pod, 2 each Leg, 1 Torso)
Reflex Controls, Supercharged Engines, ACE +100%, Monocoque

Notes: The impact cannons always fire together unless one is destroyed.

Special Mecha and Drones



Migg Pitt

COST: 5142 CP (+1380 CP for 600x micromissile, +240,800 for 224x anti-EVIL missiles)
Corvette Scale (1:10)
Availability: since before 500,000 BC to ???? BC, again in 2036

HEIGHT:
164m
WIDTH:
118m
LENGTH:
84m
WEIGHT:
354,000 kg

Mode	MV	Land MA	Fly MA
Power Armor	-2	7 (350m/round)	54 (2700m/round)

Maneuver Pool +133%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MgH	220	330	MgH/B	110	110 (DC 40)
Head		AH	90	135	MgH/B	110	110
Right Arm		MgH	110	165	MgH/B	110	110
Left Arm		MgH	110	165	MgH/B	110	110
Right Leg		MgH	110	165	MgH/B	110	110
Left Leg		MgH	110	165	MgH/B	110	110

Thrusters	Location	MA
Thruster	Torso	15

Thruster	Torso	15
Thruster	Right Leg	12
Thruster	Left Leg	12

Sensors	**Location**	**Kills**	**Sensors**	**Communications**
AH	Head	20	200 km	18,000 km
Backup	Torso	20	10 km	3000 km

Weapon	**Location**	**DMG**	**Range**	**WA**	**Kills**	**Shots**	**Notes**
Hands	Arms	90K	Melee	+0	50	U	Quick, Handy
Beam Cannon	Torso	100K	250,000	+1	100	U	Warmup 1, Crosslinked
Beam Cannon	Torso	100K	250,000	+1	100	U	Warmup 1, Crosslinked
Beam Cannon	Torso	100K	250,000	+1	100	U	Warmup 1, Crosslinked
Micromissile	Right Arm	3K	32	+2	30	150	CMV, Linked
Micromissile	Right Arm	3K	32	+2	30	150	CMV, Linked
Micromissile	Left Arm	3K	32	+2	30	150	CMV, Linked
Micromissile	Left Arm	3K	32	+2	30	150	CMV, Linked
Anti-EVIL Rack	Right Leg	20K	127^2	+2	80	56	Blast 2, Long Range, Link
Anti-EVIL Rack	Right Leg	20K	127^2	+2	80	56	Blast 2, Long Range, Link
Anti-EVIL Rack	Left Leg	20K	127^2	+2	80	56	Blast 2, Long Range, Link
Anti-EVIL Rack	Left Leg	20K	127^2	+2	80	56	Blast 2, Long Range, Link

* Micromissile clusters can fire in volleys of up to 50 missiles at a time (micromissiles are 1:1 scale). Anti-EVIL LRM racks can fire in volleys of up to 28 missiles at a time.

Optional Systems
Nightsight, Spotlight, Combat Computer, Self Destruct, Escape Pod (Gluuhaug Regult)
AAB Controller, Scaled Armor

Multipliers
Environmentals (all), Verniers, Supercharged Engines, ACE +67%, Monocoque

Notes
May be piloted with either Zentraedi power armor piloting skill.

Bitoqua Automatic Attack Drone Type I

COST: 162.6 CP
Availability: since before 500,000 BC to 20XX

HEIGHT: 1.5m
WIDTH: 1.5m
LENGTH: 3.1m
WEIGHT: 800 kg

Mode	**MV**	**Land MA**		**Fly MA**	
Drone		+1	--		54 (2,700m/round)

Maneuver Pool +0%

Servo	**Class**	**Kills**	**Spaces**	**Armor**	**SP**	**Kills**
Fuselage		MW	12	12	HS	5	5

Thrusters	**Location**	**MA**
Thruster	Fuselage	54

Sensors	Location	Kills	Sensors	Communications
LH	Fuselage	2	20 km	1800 km

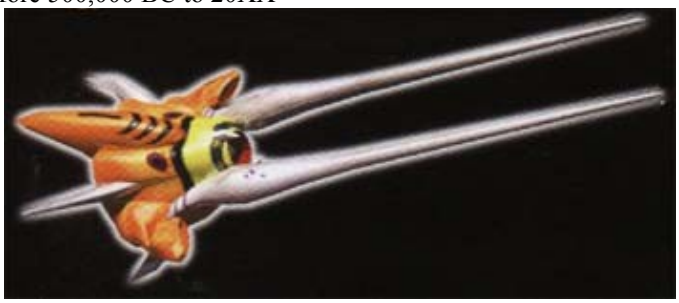
Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Electron Beam	Fuselage	10K	160	+1	10	U	

Optional Systems
Self Destruct, Combat Computer

Multipliers
Internal Automation (Rank 5, Skills: Pilot, Weaponry, Dodge & Evade)

Bitoqua Automatic Attack Bit Drone Type II

COST: 191.4 CP
Availability: since before 500,000 BC to 20XX



HEIGHT:
5.5m
WIDTH:
4.0m
LENGTH:
10.4m
WEIGHT:
5,000 kg

Mode	MV	Land MA	Fly MA
Drone	-1	--	15 (750m/round)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills
Main Body		STR	6	6	STR/Ab	3	3

Thrusters	Location	MA
Thruster	Torso	15

Sensors	Location	Kills	Sensors	Communications
LW	Torso	1	3 km	500 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Beam Gun	Torso	3K	24	+0	3	U	Linked
Beam Gun	Torso	3K	24	+0	3	U	Linked
Anti-Air Laser	Torso	1K	24	+0	1	U	BV2, Link, Phalanx Vari
Anti-Air Laser	Torso	1K	24	+0	1	U	BV2, Link, Phalanx Vari
Anti-Air Laser	Torso	1K	24	+0	1	U	BV2, Link, Phalanx Vari
Anti-Air Laser	Torso	1K	24	+0	1	U	BV2, Link, Phalanx Vari

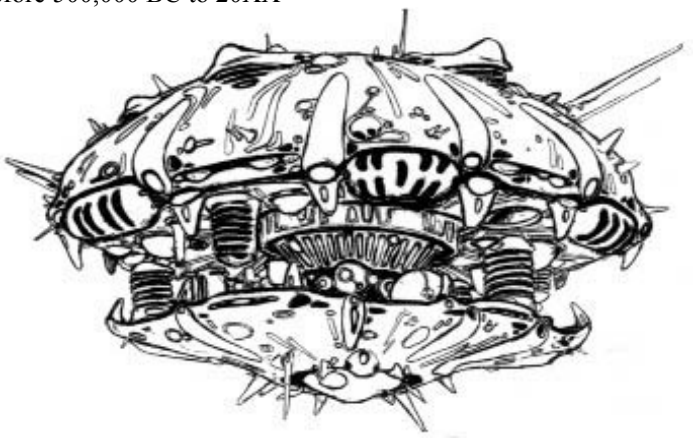
Optional Systems
Nightsight, Spotlight, Combat Computer

Multipliers
Environmentals (Space), Internal Automation (Level 5, Portfolio 3: Gunnery, Dodge, Pilot)

Programme: Automatic attack drone that can be controlled by capital ship computers or any mecha with an AAB controller (such as the Migg Pitt).

Automated Weapons Platform

COST: 300,372 CP
Availability: since before 500,000 BC to 20XX



HEIGHT:
61m
WIDTH:
100.0m
LENGTH:
100.0m
WEIGHT:
20,000 tons

Mode	MV	Land MA		Fly MA	
Drone		-7	--		10 (500m/round)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MgH	220	220	AH/Ab	80	80
Head		HS	60	60	AH/Ab	80	80

Thrusters	Location	MA
Thruster	Torso	10

Sensors	Location	Kills	Sensors	Communications
LW	Head	10	30 km	5000 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Medium Laser	Torso	100K	250,000	+1	100	U	
Medium Laser	Torso	100K	250,000	+1	100	U	
Laser Cannon	Torso	10K	24	+1	10	U	Crosslinked

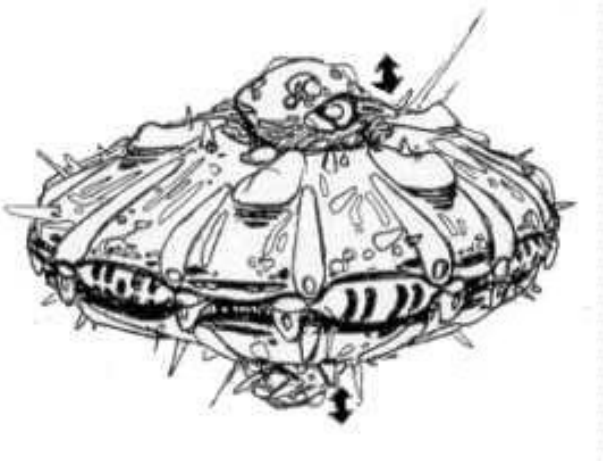
24 total: 16 mounted on the top, 8 mounted on the bottom; 16 max at one target

IRM Rack	Torso	5K	1200	-1	33	100	Crosslinked

10 total racks

Optional Systems
Nightsight, Spotlight, Combat Computer, Advanced Sensors, Target Analyzer

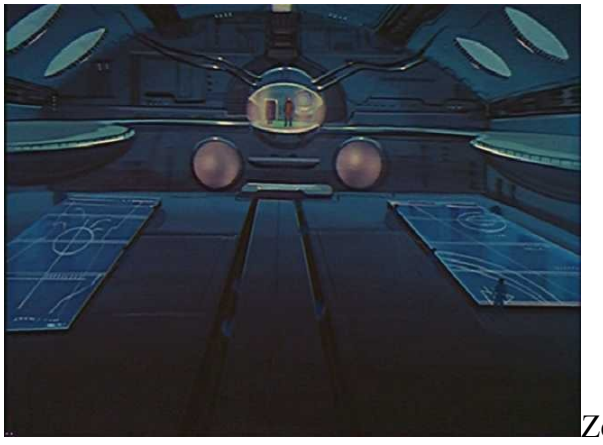
Multipliers
Environmentals (Space), Internal Automation (Level 5, Portfolio 3: Gunnery, Dodge, Pilot)
Verniers (30 in Torso)



Programme: Corvette-scale heavy weapons platform for guarding capital ship interiors from invaders. Capable of making up to 10 attacks per round without penalty.

Chapter 7 – Zentraedi Capital Ships

All of the ships of the Zentraedi and Meltrandi fleets were designed by the Protoculture. Overall they are largely similar in function and weapons, although they had distinct appearances – the Zentran ships are usually green in color and more rounded, while the Meltran have sharp angles and are usually purple in color. Also, these capital ships are not equipped with any CIDS systems, relying on their countless mecha to ward off enemy mecha.


Zentraedi bridge

Techno-Organic Components

As stated previously, parts of Protoculture technology used for Zentran and Meltran forces is partially organic in nature. This is best shown in the controls of the

Meltran power armor suits and the living link between fleet commanders and their super-scale command vessels. These ships also have techno-organic computers and "advisor" units. This is considered part of normal Zentraedi technology and requires no additional cost multipliers due to the advanced super-science used by the Protoculture.

All of the super-scale command ships have four to six such techno-organic advisors in the command room. These advisors appear to be a large cranial unit sprouting many tendrils, with a long mechanical spine-like appendage. The neural tissue contained in the cranial unit of them is so dense that their computational and storage capacity is better than any type of computer system available to fleet commanders, thus making their counsel indispensable. These advisors also have the ability to interact with the command base's systems, other Zentraedi technology, and Zentraedi themselves via the tendrils that sprout from his unusual form. These tendrils are organic data transfer jacks and allow them to process vast amounts of data very quickly (functions as Telemechanics and Telepathy). Note that Records Officers and Supreme Commanders have this same ability.

Any other forces trying to adapt this techno-organic technology to their own must pay the standard cost multiplier listed in Mekton Zeta Plus.

Mecha Override Control

Most fleet flagships can override the controls of all Zentraedi mecha within their sensor range. This automatically powers down their weapons and puts them on autopilot to return to the hanger of the capital ship that they were launched from (or one that has room should their ship have been destroyed). This feature was added to keep tabs on Zentraedi forces that may succumb to their innately aggressive nature. The Meltran flagship has a similar device that affects Meltran mecha, but is less frequently needed. This unit takes 1 space and costs 100 CP.

Radio/Radar Interference Network

The capital ships of the Zentraedi Series can emit a powerful jamming signal that prevents long-range communications. This functions as a Rank 10 ECM with a radius of 1625 hexes (82.5 km). By linking up with other Zentraedi capital ships, they may create a "net" to block communications over a large area. This unit also includes a radar-jamming device that functions as a Rank 8 ECM with a radius of 330 hexes (16.5 km). This full unit takes 15 spaces, has 30 Kills and costs 1600 CP.

Hyperspace Communications System

This system is found on most flagships, allowing the fleets to communicate with their commander regardless of distance. It is from this that the UN Spacy eventually develops the Galaxy Network. This system takes up 1 space and costs 500 CP.

Automated Medical Facilities

While most severely injured Zentraedi are left on the battlefield to die, slightly injured ones are brought back to the capital ships for medical treatment. The automated facilities can recover up to 20 Hits per patient per day. Furthermore they can restore a dead Zentraedi back to life if he has been dead for 15 minutes or less (due to their tailored DNA structure). This "resurrection" is usually reserved for favored officers and ace pilots.

Bio-Scan Chamber

This allows the records officers to study and analyze biological forms, providing them with very detailed data regarding physiology, chemical and genetic structure. It is fully automatic. This takes up no space as it is included in part of their medical facility and costs 50 CP.

Science Facilities

Because of the Zentraedi lack of education, most command ships have automated science facilities that can analyze creatures and so forth for the Zentraedi and report the findings. The facilities have the equivalent of INT and TECH 5 with any applicable skills at rank 5. For those who are already trained in such skills, the facilities grant a +3 bonus to their skill checks. This adds no cost and is considered part of the medical bays.

Cross Fold System

A highly advanced fold manipulation system, the Cross Fold System is able to manipulate the fold reaction of other ships and redirect them to other coordinates, in effect changing the course of the folding ships. When target ship(s) have entered a hyperspace fold, the de-fold coordinates are preset. The Cross Fold System, intercepts the ships in Hyperspace and creates a premature drop back into normal space at any desired location. The Cross Fold System is effective up to 1 AU (149,504,094.92 km) distant from the ship. This system costs 5,000 CP, has 200 Kills and takes up 2 Spaces.

Internal Sensors

The internal sensors of a Zentraedi vessel can monitor temperature, radiation, motion, explosions/fires and other disturbances, and chemical make-up of the ship's air supply. It should be noted that the sensors cannot detect micronians without a vehicle or mecha.

Nutrition & Water Dispensers

At various places within a Zentraedi vessel are stations that dispense water and synthesized nutritional food for the troops. This "food" is bland, flavorless and completely unappetizing, but is highly nutritional. Through recycling, these supplies can last for 10 to 12 years.

Meltran Modular Construction

Meltran ships are built with a modular design, so that destroying one section has less chance of destroying the entire vessel. When a Meltran ship is hit with a critical strike that would destroy the ship, the ship can detach the module and avoid destruction on a 1-4 on a d10, but they still lose the module and associated systems.

Zentran Capital Ships

Nupetiet Vergnitzs-bis Class Medium-Sized Fleet Command Battleship
Nupetiet-Volgrol Class Medium Battleship
Gragleb-Wovfl Class Medium Battleship
Queadol-Magdomilla Class Command Battleship

Thuverl Salan Class Standard Battleship
Quitra Queleual Class Landing Ship
Rin Nadow Lojm Monitor
Thiev Salan Class Scout Ship
Zentraedi Troop Transport
Launch Type II Shuttle
Golg Gants Chart Heavy Attacker
Fulbtzs-Berrentzs Class Fleet Command Base
Spiral Nebula Class Fleet Command Base
Quel-Quallie Theatre Scout Pod
Reentry Pod

Meltran Capital Ships
Gunship
Flagship
Fast Patrol Ship
Carrier
Heavy Frigate
Scout Ship
Troopship
Laplamiz Class Fleet Command Base
Leplendis Class Fleet Command Base [?]

Fulbtzs-Berrentzs Fleet Command Base

An integral part to any Zentraedi, or Meltrandi fleet is the central command base. Command bases usually contains the leader of the particular fleet, the Fulbtzs-Berrentzs base commanded by Boddole Zer is physically connected to Boddole Zer himself. Organic looking in nature, the Fulbtzs-Berrentzs Base is over 200,000 years old, and Bodolza has sat within its confines since its construction, his body being kept alive by extensive life support machinery. Armed with particle beam cannons, missile launchers, and an immense planetary scale converging beam cannon, this ship combined with its escort fleet of over 4 million Zentran warships, can decimate a planetary surface in minutes. The Command Base defolded in Earth orbit in 2010 in an attempt to gain access to technology possessed by the micronians, most notably, access to Protocultures. This would have allowed the Boddole Zer Fleet and the Zentraedi in general to repair their own equipment, something they rely on automated systems to do. The Gorg Bodolza base is believed to have survived for over 120,000 cycles. Zentraedi historical records estimate 1000 of such command ships were built.

Golg Gants Charts Heavy Attacker

The Golg Gants Charts Heavy Attacker is a highly feared craft utilized by the Zentraedi to hunt and kill enemy ships. Due to its small size and maneuverability it is able to close in on enemy ships and attack whilst evading returning fire. Its primary weapon is a converging beam cannon that provides a much bigger punch that it appears due to an oversized reactor feeding it.

The pilot and gunner are not positioned in the conventional manner. The gunner sits in a rotating gun emplacement on the starboard dorsal fuselage of the craft, whilst the pilot is situated just to the left of the main converging beam cannon housing. Whilst it is the gunners responsibility to fire the anti-air rotational gun, and keep mecha units off them, it is the pilot who is responsible for the primary weapon, and anti-mecha missile launchers.

Due to its maneuverability and hard hitting power, the Golg Gants Charts is feared by enemy units. The Heavy Attacker is commonly supported by regular mecha units to provide additional anti-mecha defense whilst it makes its runs against enemy ships.

Laplamiz Fleet Command Base

An integral part to any Meltrandi, or Zentraedi fleet is the central command base. Command bases usually contain the leader of the particular fleet. The Laplamiz command base was physically connected to Laplamiz herself. Organic in nature, the Laplamiz command base was thought to be over half a billion years old. Armed with particle beam cannons, missile launchers, and an immense planetary scale converging beam cannon, this ship combined with its escort fleet of between 4 and 5 million vessels, can decimate a planet in minutes.

The Leplendis command base may be the same style of vessel.

Meltrandi Carrier / LST

The Laplamiz fleet carrier, was specifically designed for operations in this galaxy to ferry many fighter craft into battle. Used almost exclusively by the Laplamiz fleet, these ships accompany front line units and can be used as battle command posts. Primarily, the LST, or Landing Ship Tank, is tasked with launching, recovering, and maintaining the vast majority of the Laplamiz fleet's Queadlunn-Rau.

Meltrandi Fast Patrol Ship

The Laplamiz fleet had a variety of ships that fulfilled a variety of missions. Tasked with quick response and moderate firepower, the fast patrol ship could respond to critical situations in remote systems faster than any other ship in the fleet, the flagship included. Fast patrol ships are equipped with large command and control facilities to deal with the remote nature of their missions. They also have an enhanced communications array, allowing the fast patrol ship to remain in contact with its fleet when it travels far ahead of the fleet.

Meltrandi Flagship

The Meltrandi Flagship is the largest ship in the Meltran fleet. It is capable of ferrying large numbers of Queadlunn-Rau Power Armor and troops into combat. During the final battle of Space War I over Earth, many of these ships were lost, however, the few that remained were integrated into the UN Spacy Earth Defense Force charged with the protection of Earth, many others not allied with Earth fled the battle and still roam the galaxy. These ships had and interesting feature in that the small command section could detach from the main hull, much like the Zentraedi Queadol-Magdomilla command ship. Unlike the Zentraedi version, the Flagship was designed to go into combat and leave the

command section behind to coordinate the fleet attack. Unlike other fleet flagships, this configuration was not equipped with a heavy particle beam cannon. Its most deadly weapon is the incredible numbers of Queadlunn-Rau it carries (just over 4000).

Meltrandi Gunship

The Meltran Gunship is similar in design to the Meltran heavy frigate as both feature slender central body sections and boom arms. The Meltrandi gunship is the most common of all of the Meltran capital ships, and the most famous, its visage gracing many images about the Meltran fleet at the final battle of Space War I. The Meltran gunship is the most common Meltrandi vessel rebuilt for use in the UN Spacy.

Meltrandi Heavy Frigate

The Meltrandi Heavy Frigate is a medium size warship and a mainstay of the Laplamiz fleet. This ship has adequate weaponry to deal with common threats, and carries a fairly impressive compliment of approximately 1000 mecha to deal with enemy mecha.

Meltrandi Scout Ship

The Meltrandi Scout Ship, sometimes referred to as a "pocket battleship", issued to scout out potential enemies and report back to the main fleet. The Laplamiz fleet uses this particular model. Not heavily armed, when the scout ship expects an armed conflict to arise, they are often deployed in teams, or with a gunship to act as escort. These ships can also function close in defense units in a fleet formation, protecting the larger ships from concentrated missile fire from opposing fleets. Their small size means that many of them can be positioned around a larger warship, such as the flagship, for additional defense.

Meltrandi Troopship

Similar in function to the Meltran Fleet Carrier, the Troopship is designed to ferry large numbers of Queadlunn-Rau Power Armour troops into battle. Roughly half the size of the Meltran Carrier the Troopship is effectively an armed and armored freighter, albeit it one armed with deadly weapons and carrying dangerous mecha and troops. Whereas the Meltran Carrier is commonly a small Fleet flagship the Troopship is one of the last ships to be considered for the duty. Due to its tendency to sit back and disgorge its cargo the Meltran Troopship is a vessel that largely survived the final battle of Space War I due to its tendency hang back from direct toe to toe combat.

Meltran Troopships can still be found throughout the galaxy making up large portions of Meltran Fleets ferrying Queadlunn-Rau Power Armors from battlefront to battlefront.

Nupetiet Vergnitzs-bis Flagship

Medium-scale fleet command battleship designed at the height of the development competitions during the early years of the Schism War. Flagship of Boddole Zer Main Fleet's 67th Glruimual class branch Vrlitwhai (Adoclas) Fleet. This ship is one

of the largest available to Zentran forces, and is armed with a heavy particle beam cannon.

Octy-Gundoula Flagship

Large-scale fleet command battleship designed at the end of the Schism War. Equipped with a unique Cross Fold System and a heavy particle beam cannon, this is a fearsome opponent. The production planet where these giant flagships are constructed was thought lost until rediscovered by Kamjin in 2034. Utilizing several of these command ships and an ancient Protoculture communications system, he was able to gain the cooperation of the Neld, and later the Burado fleets to assist him in his deadly goals. The Neld fleet had very few of these ships, and all were lost when the Neld Command Base was destroyed. The Burado fleet fielded many more of these vessels, but most were lost again.

Queadol-Magdomilla Command Ship

As a fleet Command Ship, it has been in use since the middle stages of the Galactic Empire's Schism War. Flagship of Bodolza Main Fleet's 109th Branch Fleet's 7th Aerial Armored Division. Its primary strength is aerial assault, for it has a unique modular system composed of a bow section which can separate for descending into a planet's atmosphere.

Quel-Quallie Theatre Scout Pod

The Boquomouxy Quel-Quallie Theatre Scout Pod is an advanced reconnaissance vehicle used by the Zentraedi forces. With a crew of three, (pilot, co-pilot/gunner, and sensor operator,) the Quel-Quallie is able to gather data on enemy forces from long distances due to its advanced sensor equipment. Due to its size and armor, it is also able to withstand most mecha attacks. The Quel-Quallie Theatre Scout Recon Pod is 126.7 meters long, which by human scales is small capital ship, but by Zentraedi standards is merely a large mecha. However like all ships, the Quel-Quallie relies on venire thrusters for flight control, without them it would be unable to make any form of movement other than forwards. Amongst the Quel-Quallie's impressive sensor systems are a super-long-range early-warning Doppler radar, gravity wave passive radar, optical systems, electromagnetic systems, passive and active particle system cluster – making it roughly the equivalent to the UN Spacy's VE-1 Elintseeker for sensor capabilities.

Quitra Queleual Troop Carrier (LST)

The Zentraedi Carrier is a main battle ship primarily designed to ferry large amounts of small attack craft into battle. Its weapon systems are stilted towards its fighters and other battle mecha, but it does have defensive armaments. This long-lived ship series has been in use as the one of the Zentraedi's standard carriers since the early-years of the Galactic Empire's Schism War. It has a round-cylinder configuration and does not posses a large forward firing beam cannon, instead relying on more traditional weapon systems.

Reentry Pod

This is a simple landing vessel capable of transporting troops from a capital ship to planetside or to recover them and return to their ship. The pod has no weapons and is capable of landing on both land and water.

Rin Nadow Lojm Monitor

The monitor is a Zentraedi gunship, being primarily a heavy particle beam cannon with an engine. At just over 1200m long, the ship was the second smallest in the fleet (only larger than the Salan). It carried few mecha and a relatively small armament, but its heavy particle beam cannon made it an invaluable asset. The cannon itself was modeled along the same "bow split" design as the cannon on the larger flagship, giving the monitor a long, somewhat stretched appearance resembling the bow portion of the Queadol-Magdomilla class command ship.

Initially, monitors were only assigned to large fleets under the command of trusted senior officers. The Protoculture considered it too dangerous for potentially untrustworthy commanders (such as Kamjin) to use this ship. Later, as the Zentraedi fleet's resources began to deplete, the ships were all re-assigned to a special fleet under the personal command of Boddole Zer. These ships were used in the Zentraedi assault on Earth, and accounted for the majority of damage done to the planet. Most of them were destroyed in the counterattack by the SDF-1 and Vrlitwhai's fleet. A few survived and were either scrapped for components for the UN's fleet or rebuilt as part of the Earth Defense Force.

Salan Scout Ship

The Zentraedi Picket/Scout Ship, sometimes referred to as a "Pocket Battleship", is used to scout out potential enemy's and report back to the main fleet. The scout ship's sophisticated system was almost equal to that of the much larger flagship. No other fleet vessels had as sophisticated a system. This particular model is used by the Boddole Zer fleet. Not heavily armed, when the scout ship expects an armed conflict to arise, they are often deployed in teams, or with a gunship to act as escort. These ships can also function close in defense units in a fleet formation, protecting the larger ships from concentrated missile fire from opposing fleets. Their small size means that many of them can be positioned around a larger warship, such as a flagship.

Spiral Nebula Fleet Command Base

This ship of the Spiral Nebula Arm Central Fleet Flagship class is the largest ship within the fleet. In the entire Zentraedi Army, there are probably 1000 to 2000 ships of this class. Organic in nature, the Spiral Nebula command base was thought to be tens of thousands of years old. Armed with laser cannons and missile launchers this ship combined with its escort fleet of between 4 and 5 million Zentraedi ships, can decimate a planetary surface in minutes.

In 2036 the Neld Fleet invaded the Solar System. Commander Neld had developed an alliance with Kamjin, formerly of the Bodolza Fleet under Vrlitwhai 's command. Kamjin had developed a defense to the Minmei attack and contacted the Neld Fleet using an ancient Protoculture Communications Network. Commander Neld integrated the Sound Defense technology into his fleet and began his invasion.

The invasion consisted of two fronts, one near Neptune, the other Mars. The Neptune offensive eventually shifted to Earth Orbit. The Neld Flagship remained near Mars where it was eventually defeated in an attack by the Vrlitwhai Fleet.

In 2037 the Burado Fleet invaded the Solar System. As in the previous year, Kamjin had formed another alliance, this time with Commander Burado. The Burado Fleet was a significantly more well armed fleet than the Neld fleet, as they contained large numbers of the Octy-Gundoula Flagships. The Burado Fleet was successful in attacking all parts of the Solar system, from Earth, to the First Perimeter Defensive Lines at Saturn. Unlike the Neld Fleet, Commander Burado was also able to send Zentraedi Infiltrators into the Earth Forces.

After all the Octy-Gundoula Flagships were destroyed, the Burado Command Base was attacked in a massive all out assault near Saturn. Utilizing the "Minmei Attack" and huge flotillas of gunships, a breach was formed that allowed a group of courageous UN Spacy pilots to gain access to the base and destroy it.

Thuverl Salan Destroyer

The Zentraedi Destroyer is a main battle ship designed for a variety of missions. It has an excellent mix of ship-borne weapon systems and mecha battle systems enabling it to fulfill its missions. This long-lived ship series has been in use as the one of the Zentraedi's standard battleship since the later years of the Protoculture Era before the Galactic Empire's Schism War. It has a sharp configuration but does not posses a large forward firing beam cannon, instead relying on its traditional weapon systems.

Zentraedi Transport (Launch Type II Shuttle)

Small lightly armored spacecraft designed for short-range flight. Vrlitwhai, Exsedol, and another Zentraedi soldier used one of these to deliver “the samples” to Boddole Zer. This ship is essentially a Zentraedi-sized shuttlecraft.

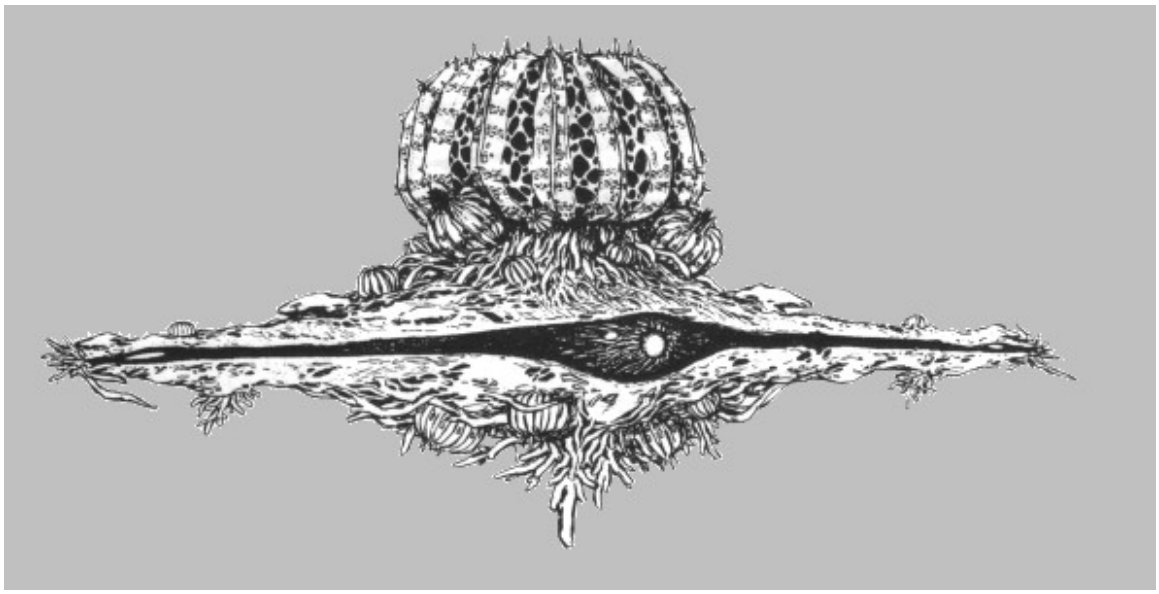
Zentraedi Troop Transport

Small armored spacecraft designed to deliver small troops where the larger ships may not be accessible. One such vessel was seen in Macross DYRL, when the Nousjadeul-Ger units apprehended Hikaru and Minmei, as well as Misa, Lynn Kaifuun and Roy, while near the rings of Saturn.

Zentraedi Vessels

Fulbtzs-Berrentzs Mobile Command Base

COST: 153,997,760 CP
Manufacturer: Fulbtzs-Berrentzs Fully-Automated Armory Planet



HEIGHT: 170 km
WIDTH: 1400 km
LENGTH: 600 km (150 km upper sphere)
WEIGHT: 61,178,000,000 tons
CREW: 100,000 personnel, 100,000,000 soldiers in stasis

Hull Class: MegaHeavy (1:100 scale)
KILLS: 613,950
ARMOR: SP 110
SPACES: 61,197

MA: 0.5 (10 kmph)
Turn: +110
Crew Quality: A (16 +1d10)

System	Kills	Range
MgH Communications	400	100,000 km
MgH Sensors	400	16,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Planetary Cannon	FF	500,000	6,437,376	+3	5000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 5						
Heavy Particle Gun (500)	All	5000K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 5						
Light Laser (4,400)	All	50K	123,597	+1	50	U
Missile Turret (3000)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (200)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

Mecha/Shuttle Compliment

Regult Pod	11,000
Regult Gluuhaug	1,000
Regult Serauhaug	1,000
Del Regult	500
Glaug	1,000

Nousjadeul-Ger	10,000
Quel-Quallie	100
Recovery Pods	100
Reentry Pods	500
Shuttlecraft	500

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Radio/Radar Interference Network
Bio-Scan Chamber, Mecha Override Control, Life Support (100,000 for indefinitely)
Cloning Facilities, Techno-Organic Advisors (4), Advanced Scientific Facilities
Techno-Organic Command Control

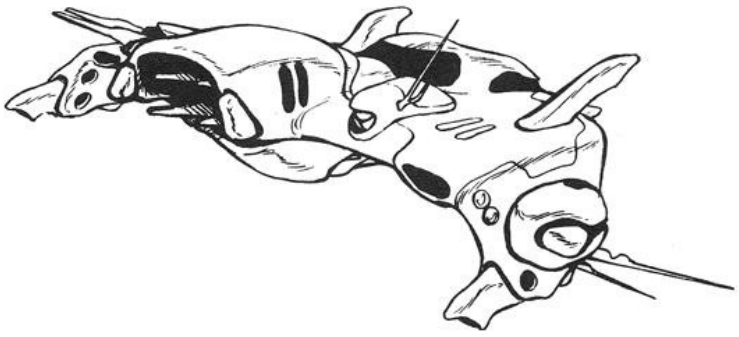
Bays
Mecha: 280 bays (33,600 capacity)
Crew: 8,300 bays (100,430,000 capacity)
Cargo: 1000 bays (6,050,000 ton capacity)
Medical Bay: 5 bays (60,500 capacity)
Repair Bay: 100 bays (1200 capacity)

Multipliers
Engines MA 0.5 (x-0.2), Hyperspace Drive (x1.0), Crew Grade A (x1.0)

Notes: This monstrous command base was the center of the Boddole Zer fleet in the Macross Movie. It is quite different from the TV design version that was noted as being 1400 km at its widest point. (This being the length of the Japanese islands.) This version also appears to be physically linked to Boddole Zer himself. When Hikaru Ichijyo finally blasted him to bits, the entire ship seemed to waste away. Boddole Zer's head was the only part of him that seemed to exist, it sat atop a large column the went into the core of the ship. His head was also monstrous. His head was easily larger than any other Zentraedi, including Vrlitwhai.

Golg Gants Charts

COST: 176,608 CP
Manufacturer: Ishlytlagl Fully-Automated Armory Planet



HEIGHT: 49 m
WIDTH: 75 m
LENGTH: 83 m
WEIGHT: 89.5 tons
CREW: 2, pilot and gunner

Hull Class: Striker
KILLS: 550
ARMOR: SP 50
SPACES: 6 +10

MA: 54 (Mach 8)
Turn: +3
Crew Grade: B (14+1d10)

System	Kills	Range
AH Communications	30	30,000 km
LW Sensors	10	161 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Heavy Laser (1)	FF	200K	6,437,376	+1	200	U
Light Laser (1)	All	50K	123,597	+1	50	U
Missile Turret (2)	All	12K	127^2	+1	50	50

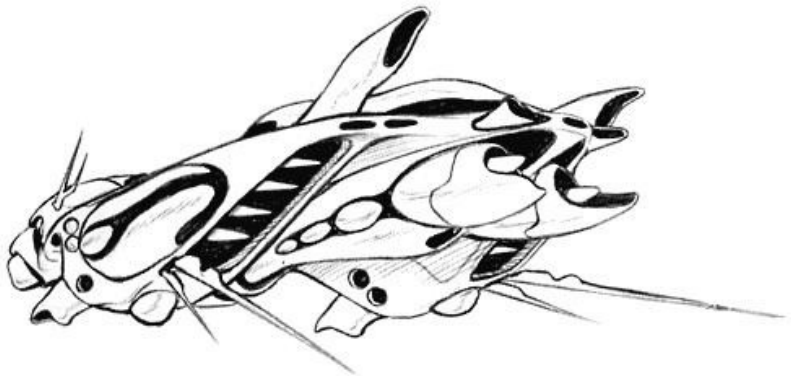
Long Range, Blast 2, Fires volleys of up to 10 per launcher

Mecha/Shuttle Compliment
None

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (2 for 1 week)
Antigravity Drive, Self Destruct

Bays
Mecha: none
Crew: 1
Cargo: none
Medical Bay: none
Repair Bay: none

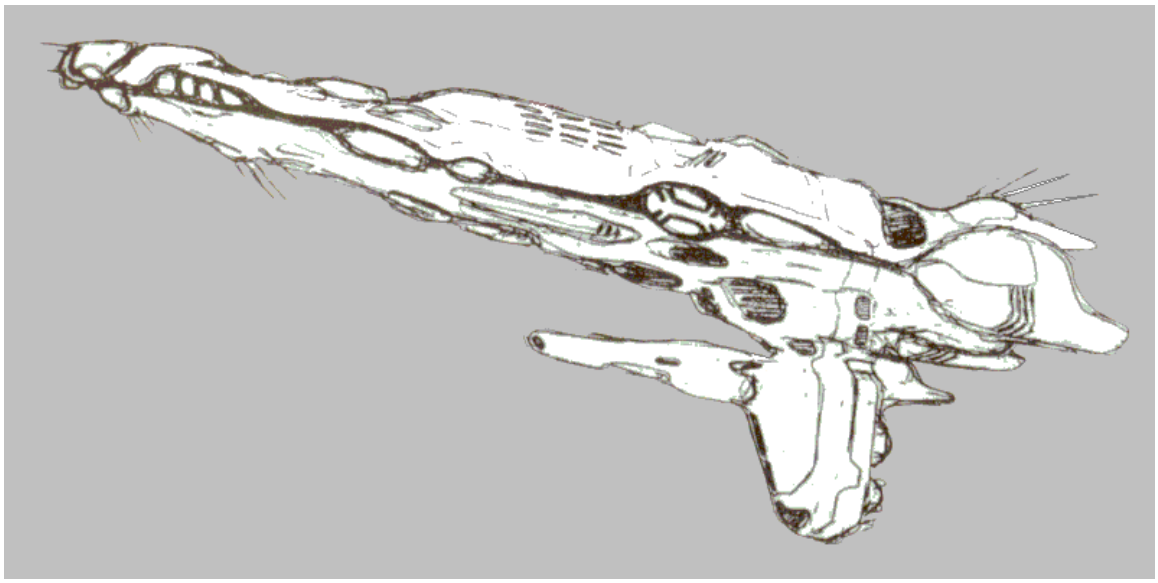
Multipliers
Engines MA 54 (x4.5), Crew Grade B (x0.6), Weight Efficiency (x0.2)



Programme: This patrol ship is used in advance of the main fleet in engagements.

Gragleb-Wovfl Medium Battleship

COST: 2,095,587 CP
Manufacturer: Worquli-Quatafilla 755819th Zentraedi Fully-Automated Armory Planet



HEIGHT: 620m (740m with lower pylon)
WIDTH: 600m
LENGTH: 4010m
WEIGHT: 172,000,000 tons
CREW: 4,000 assigned crew/personnel, 4660 assigned combat soldiers usually with another 6000 or more withdrawn from stasis as needed. Stasis can hold 28,900 warriors. Total Personnel 37,560.

Hull Class: MegaHeavy +
KILLS: 3890
ARMOR: SP 110
SPACES: 191

MA: 34 (Mach 3)
Turn: +11
Crew Grade: B (14 + 1d10)

System	**Kills**	**Range**
SL Communications	50	30,000 km
HS Sensors (excessive)	200	130,000 km

Weapon	**Arc**	**DMG**	**Range**	**WA**	**Kills**	**Payload**
Heavy Particle Cannon	FF	5000K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3						
Superheavy Laser (1)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Light Laser (30)	All	50K	123,597	+1	50	U
Missile Turret (50)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (30)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

Mecha/Shuttle Compliment

Regult Pod	550
Regult Serauhaug	50
Regult Gluuhaug	50
Del Regult Scout	50

Glaug	25
Glaug Rocket Sled	5
Raulon-Ve	500
Nousjadeul-Ger	300
Quel-Quallie	4
Recovery Pods	6
Reentry Pods	6
Shuttlecraft	6

Optional Systems
Mecha Override Control, Hyperspace Communications Array, Radar/Radio Interference Network Subspace Mass Sensors, Self Destruct, Antigravity Drive, Bio-Scan Chamber

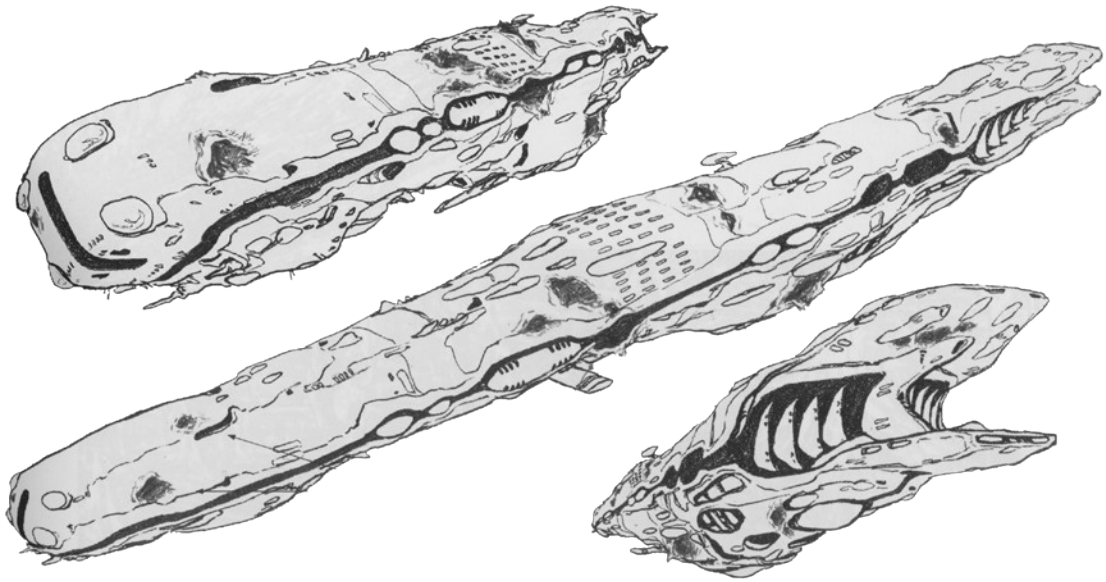
Bays
Mecha: 13 (1,560 capacity)
Crew: 4 (48,400 capacity)
Cargo: 10 (60,500 ton capacity)
Medical Bay: 1 (12,100 capacity)
Repair Bay: 0 (0 capacity)

Multipliers
Engines MA 34 (x1.1), Hyperspace (x1.0), Crew Grade B (x0.6)

Programme: Medium-scale fleet command battleship designed at the beginning of the development competitions during the early years of the Schism War. This ship may have been a precursor to the Nupetiet Vergnitzs-bis flagship.

Nupetiet Vergnitzs-bis

COST: 5,656,032 CP
Manufacturer: Worquli-Quatafilla 755819th Zentraedi Fully-Automated Armory Planet



HEIGHT: 620m
WIDTH: 600m
LENGTH: 4010m
WEIGHT: 170,000,000 tons

CREW: 4000 personnel, 4660 soldiers with 6000 to 28,900 soldiers in stasis

Hull Class: MegaHeavy +
KILLS: 3870
ARMOR: SP 110
SPACES: 189

MA: 34 (Mach 3)
Turn: +11
Crew Grade: A (16 + 1d10)

System	Kills	Range
SL Communications	50	30,000 km
HS Sensors (excessive)	200	130,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Heavy Particle Cannon	FF	5000K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3						
Superheavy Laser (12)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Light Laser (150)	All	50K	123,597	+1	50	U
Missile Turret (240)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (60)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

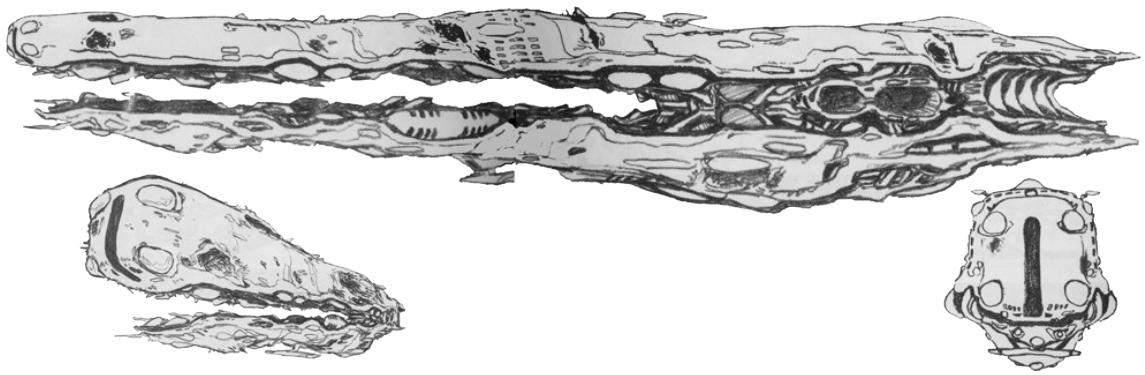
Mecha/Shuttle Compliment

Regult Pod	3150
Regult Serauhaug	350
Regult Gluuhaug	150
Del Regult Scout	50
Glaug	100
Glaug Rocket Sled	25
Raulon-Ve	400
Nousjadeul-Ger	300
Quel-Quallie	6
Recovery Pods	4
Reentry Pods	12
Shuttlecraft	6

Optional Systems
Mecha Override Control, Hyperspace Communications Array, Radar/Radio Interference Network
Subspace Mass Sensors, Self Destruct, Antigravity Drive, Bio-Scan Chamber
Life Support (38,000 for 20 years)

Bays
Mecha: 38 (4,560 capacity)
Crew: 4 (48,400 capacity)
Cargo: 10 (60,500 ton capacity)
Medical Bay: 1 (12,100 capacity)
Repair Bay: 0 (0 capacity)

Multipliers
Engines MA 34 (x1.1), Hyperspace (x1.0), Crew Grade A (x1.0)



Programme: Medium-scale fleet command battleship designed at the height of the development competitions during the early years of the Schism War. Flagship of Boddole Zer Main Fleet's 67th Glruimual class branch Vrlitwhai (Adoclass) Fleet. Repaired after Space War I and re-commissioned as the first battleship of the New United Nations Forces space fleet in December 2012.

Nupetiet-Volgrol Medium-Scale Battleship

COST: 2,032,003 CP
Manufacturer: Worquli-Quatafilla 755819th Zentraedi Fully-Automated Armory Planet

HEIGHT: 630m
WIDTH: 600m
LENGTH: 4010m
WEIGHT: 168,000,000 tons
CREW: 4,000 assigned crew/personnel, 4660 assigned combat soldiers usually with another 6000 or more withdrawn from stasis as needed. Stasis can hold 28,900 warriors. Total Personnel 37,560.

Hull Class: MegaHeavy +
KILLS: 3850
ARMOR: SP 110
SPACES: 187

MA: 34 (Mach 3)
Turn: +11
Crew Grade: A (16 + 1d10)

System	Kills	Range
SL Communications	50	30,000 km
HS Sensors (excessive)	200	130,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Heavy Particle Cannon	FF	5000K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3						
Light Laser (30)	All	50K	123,597	+1	50	U
Missile Turret (50)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (20)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

Mecha/Shuttle Compliment

Regult Pod	550
Regult Serauhaug	50
Regult Gluuhaug	50
Del Regult Scout	50
Glaug	25
Raulon-Ve	500
Nousjadeul-Ger	300
Quel-Quallie	4
Recovery Pods	6
Reentry Pods	6
Shuttlecraft	6

Optional Systems
Mecha Override Control, Hyperspace Communications Array, Radar/Radio Interference Network
Subspace Mass Sensors, Self Destruct, Antigravity Drive, Bio-Scan Chamber

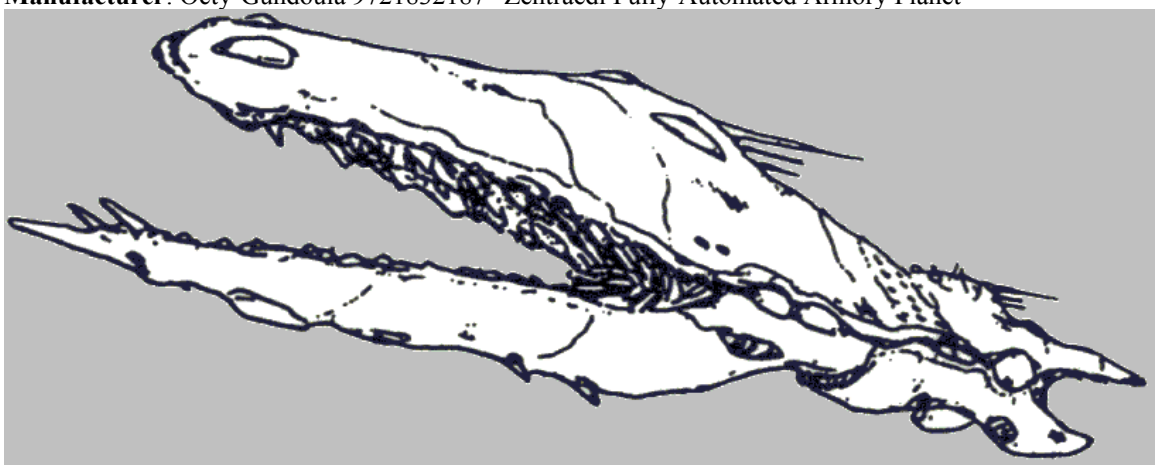
Bays
Mecha: 13 (1,560 capacity)
Crew: 4 (48,400 capacity)
Cargo: 10 (60,500 ton capacity)
Medical Bay: 1 (12,100 capacity)
Repair Bay: 0 (0 capacity)

Multipliers
Engines MA 34 (x1.1), Hyperspace (x1.0), Crew Grade B (x0.6)

Programme: Medium-scale fleet command battleship designed at the beginning of the development competitions during the early years of the Schism War. This ship may have been a precursor to the Nupetiet Vergnitzs-bis flagship.

Octy-Gundoula Flagship

COST: 1,830,227 CP
Manufacturer: Octy-Gundoula 9721832187th Zentraedi Fully-Automated Armory Planet



HEIGHT: 640m
WIDTH: 595m
LENGTH: 4800m
WEIGHT: 179,500,000 tons
CREW: 4,500 assigned crew/personnel, 4660 assigned combat soldiers usually with another 6000 or more withdrawn from stasis as needed. Stasis can hold 28,900 warriors. Total Personnel 38,060.

Hull Class: MegaHeavy +
KILLS: 3960
ARMOR: SP 100
SPACES: 198

MA: 34 (Mach 3)
Turn: +11
Crew Grade: B (14 + 1d10)

System	Kills	Range
SL Communications	50	30,000 km
HS Sensors (excessive)	200	130,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Heavy Particle Cannon	FF	5000K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3						
Light Laser (32)	All	50K	123,597	+1	50	U
Missile Turret (54)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (20)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

Mecha/Shuttle Compliment

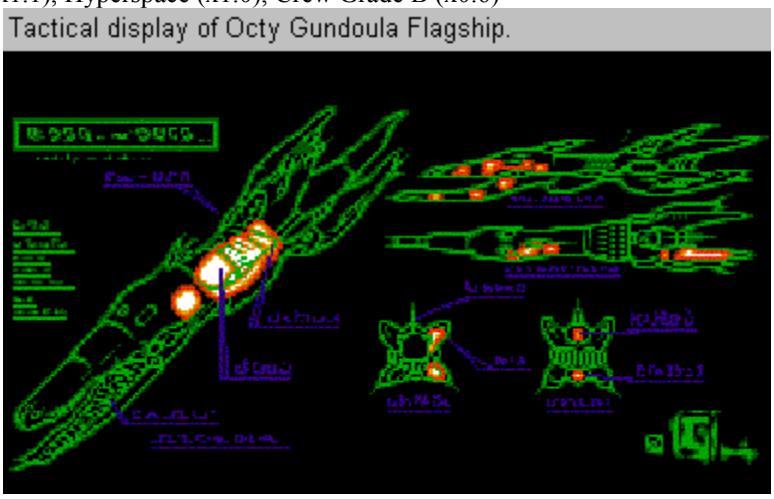
Regult Pod	550
Regult Serauhaug	50
Regult Gluuhaug	50
Del Regult Scout	50
Glaug	25
Raulon-Ve	500

Nousjadeul-Ger	300
Quel-Quallie	4
Recovery Pods	6
Reentry Pods	6
Shuttlecraft	3

Optional Systems
Hyperspace Communications Array, Subspace Mass Sensors, Self Destruct, Antigravity Drive
Mecha Override Control, Cross Fold System, Life Support (38,000 for 20 years)
Radar/Radio Interference Network, Bio-Scan Chamber

Bays
Mecha: 30 bays (3,600 capacity)
Crew: 3 bays (39,300 capacity)
Cargo: 5 bays (30,250 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: none

Multipliers
Engines MA 34 (x1.1), Hyperspace (x1.0), Crew Grade B (x0.6)



Programme: Primary command ship of the Neld fleet that attacks earth in 2036, and also a major part of the Burado fleet that attacks in 2037. Large-scale fleet command battleship designed at the end of the Schism War. This ship has a unique system that can disrupt space folding of other capital ships and cause them to defold to a location of the Octy-Gundoula's choosing.

Queadol-Magdomilla

COST: 2,847,665 CP
Manufacturer: Velquel-Quettereul 49377325th Zentraedi Fully-Automated Armory Planet

HEIGHT: 740m

Assault Module: 550m
Orbital Module: 740m

WIDTH: 800m
Assault Module: 550m
Orbital Module: 800m

LENGTH: 2700m
Assault Module: 1377m
Orbital Module: 1764m

WEIGHT: 100,300,000 tons
Assault Module: 18,000,000 tons
Orbital Module: 82,300,000 tons

CREW: 1200 personnel, 9860 soldiers with up to 2400 soldiers in stasis

Hull Class: MegaHeavy +

KILLS:
Assault Module: 2300
Orbital Module: 2900

ARMOR:
Assault Module: SP 100
Orbital Module: SP 100

SPACES:
Assault Module: 47
Orbital Module: 119

MA: 34 (Mach 3)
Turn: +11
Crew Grade: B (14 + 1d10)

System	Kills	Range
SL Communications	50	30,000 km
HS Sensors (excessive)	200	130,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (4/2)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Light Laser (54/26)	All	50K	123,597	+1	50	U
Missile Turret (12/96)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (36/4)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

* The first number is the assault module while the second number is the orbital module.

Mecha/Shuttle Compliment

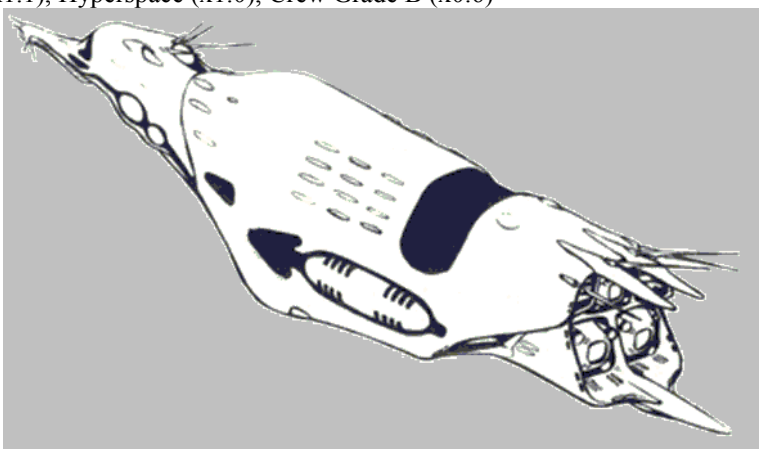
Regult Pod	310 / 1750
Regult Serauhaug	35 / 180
Regult Gluuhaug	20 / 75
Del Regult Scout	50 / 25
Glaug	15 / 50
Glaug Rocket Sled	3 / 15
Raulon-Ve	50 / 200
Nousjadeul-Ger	65 / 220
Quel-Quallie	3 / 2
Recovery Pods	2 / 4
Reentry Pods	2 / 8
Shuttlecraft	2 / 6

* Assault / Orbital section compliments

Optional Systems
Hyperspace Communications Array, Subspace Mass Sensors, Self Destruct, Antigravity Drive
Separation Coordination System, Radar/Radio Interference Network, Bio-Scan Chamber
Life Support (1500 for 10 years)

Bays
Mecha: 5 / 22 bays (600 / 2,640 capacity)
Crew: 1 / 1 bays (12,100 / 12,100 capacity)
Cargo: 5 bays (30,250 ton capacity)
Medical Bay: 1 bay (1,210 capacity)
Repair Bay: none

Multipliers
Engines MA 34 (x1.1), Hyperspace (x1.0), Crew Grade B (x0.6)



Programme: As a fleet command battleship, it has been in use since the middle stages of the Galactic Empire's Schism War. Flagship of Gorg Boddole Zer Main Fleet's109th Branch Fleet's 7th Aerial Armored Division. Its primary strength is aerial assault, for it has a unique modular system composed of a bow section which can separate for descending into a planet's atmosphere.

Quedol-Telvwo Carrier (LST)

COST: 1,221,022 CP
Manufacturer: Quedol-Telvwo 12587334th Zentraedi Fully-Automated Armory Planet

HEIGHT: 660m
WIDTH: 680m

LENGTH: 3000m
WEIGHT: 150,000,000 tons
CREW: 1800 assigned crew/personnel, 1100 assigned combat soldiers. Stasis can hold 1000 warriors. Total Personnel 3900.

Hull Class: MegaHeavy +
KILLS: 3670
ARMOR: SP 90
SPACES: 169

MA: 34 (Mach 3)
Turn: +11
Crew Grade: B (14 + 1d10)

System	Kills	Range
SL Communications	50	30,000 km
HS Sensors (excessive)	200	130,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (1)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Light Laser (17)	All	50K	123,597	+1	50	U
Missile Turret (96)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (20)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

Mecha/Shuttle Compliment

Regult Pod	990
Regult Serauhaug	45
Regult Gluuhaug	45
Del Regult Scout	45
Glaug	45
Raulon-Ve	900
Nousjadeul-Ger	540
Quel-Quallie	4
Recovery Pods	8
Reentry Pods	8
Shuttlecraft	8

Optional Systems
Hyperspace Communications Array, Subspace Mass Sensors, Self Destruct, Antigravity Drive
Life Support (29,000 for 10 years), Radar/Radio Interference Network

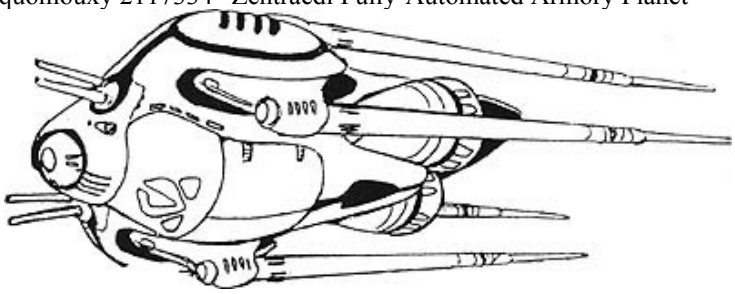
Bays
Mecha: 22 bays (2,640 capacity)
Crew: 3 bays (39,300 capacity)
Cargo: 5 bays (30,250 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: none

Multipliers
Engines MA 34 (x1.1), Hyperspace (x1.0), Crew Grade B (x0.6)

Programme: The Quedol-Telvwo is an early Schism War design and precursor to the Quiltra-Queleula.

Quel-Quallie Theatre Reconnaissance Pod

COST: 8250 CP
Manufacturer: Boquomouxy 2117334th Zentraedi Fully-Automated Armory Planet



HEIGHT: 33m, 60m with legs at full extension
WIDTH: ?
LENGTH: 126.7m
WEIGHT: 1200 tons
CREW: 3 macronized Zentraedi

Hull Class: Superlight
KILLS: 200
ARMOR: SP 30
SPACES: 2

Ground MA: 10
MA: 30 (Mach 2.5)
Turn: +1
Crew Grade: B (14+1d10)

System	Kills	Range
MW Communications	200	1500 km (960 km)
AH Sensors	300	3000 km (321 km)

Weapon	Arc	DMG	Range	WA	Kills	Payload
Rapid Fire Cannon (2)	T	10K	24	+1	10	U
BV3						
Missile Launcher (2)	F	7K	32	-1	25	12
Can fire volleys of up to 4.						

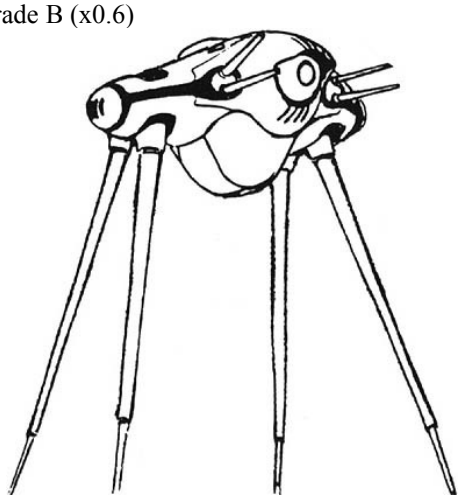
Mecha/Shuttle Compliment
None

Optional Systems
Life Support (3 for 1 year), Antigravity Drive, Advanced Sensors, Self Destruct, Escape Pod

Escape Capsule
50K, SP 20
Length: 30.5m Width: 13.7m Height: 18.3m Weight: 68 tons

Bays
Mecha: none
Crew: 1 bay (3 capacity)
Cargo: none
Medical Bay: none
Repair Bay: none

Multipliers
Engines MA 30 (x0.9), Crew Grade B (x0.6)



Programme: Developed for long range reconnaissance missions where the Salan is too big.

Quiltra Queleual

COST: 3,781,663 CP
Manufacturer: Spoltra-Shifd 18899550th Zentraedi Fully-Automated Armory Planet

HEIGHT: 680m
WIDTH: 630m
LENGTH: 3000m
WEIGHT: 150,000,000 tons
CREW: 4000 personnel, 4660 soldiers with 6870 to 28,800 soldiers in stasis

Hull Class: MegaHeavy +
KILLS: 3670
ARMOR: SP 90
SPACES: 169

MA: 34 (Mach 3)
Turn: +11
Crew Grade: B (14 + 1d10)

System	Kills	Range
SL Communications	50	30,000 km
HS Sensors (excessive)	200	130,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (17)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Light Laser (96)	All	50K	123,597	+1	50	U
Missile Turret (96)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (20)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

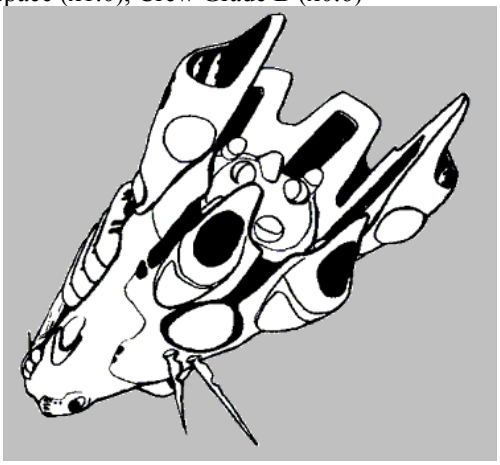
Mecha/Shuttle Compliment

Regult Pod	2500
Regult Serauhaug	250
Regult Gluuhaug	100
Del Regult Scout	35
Glaug	65
Glaug Rocket Sled	20
Raulon-Ve	300
Nousjadeul-Ger	250
Quel-Quallie	6
Recovery Pods	6
Reentry Pods	14
Shuttlecraft	4

Optional Systems
Hyperspace Communications Array, Subspace Mass Sensors, Self Destruct, Antigravity Drive
Radar/Radio Interference Network, Bio-Scan Chamber, Life Support (2900 for 10 years)

Bays
Mecha: 30 bays (3,600 capacity)
Crew: 3 bays (39,300 capacity)
Cargo: 5 bays (30,250 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: none

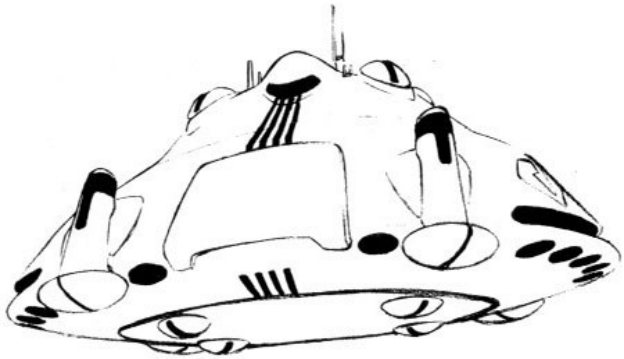
Multipliers
Engines MA 34 (x1.1), Hyperspace (x1.0), Crew Grade B (x0.6)



Programme: This planetary assault landing ship tank (LST) has been in use since the early years the Galactic Empire's Schism War

Reentry Pod

COST: 68,520 CP
Manufacturer: ??



HEIGHT: ?
WIDTH: 230 m
LENGTH: 230 m
WEIGHT: 140 tons
CREW: 3

Hull Class: Superlight
KILLS: 85
ARMOR: SP 30
SPACES: 2 + 23

MA: 28 (Mach 2)
Turn: +1
Crew Grade: B (14+1d10)

System	Kills	Range
AH Communications	30	30,000 km
LW Sensors	10	161 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
None						

Mecha/Shuttle Compliment

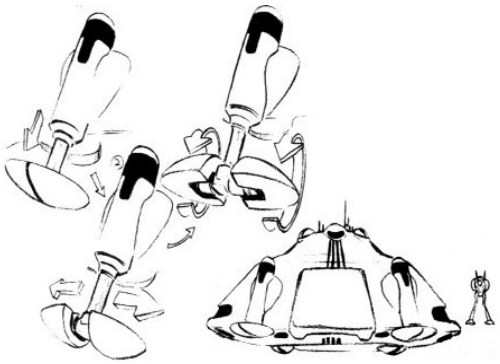
Regult	24 (replace 1 with Glaug if needed)
Infantry	48

The pod can carry either battlepods or infantry.

Optional Systems
Antigravity Drive, Self Destruct

Bays
Mecha: 24 (24 capacity)
Crew: 1 (48 capacity)
Cargo: none
Medical Bay: none
Repair Bay: none

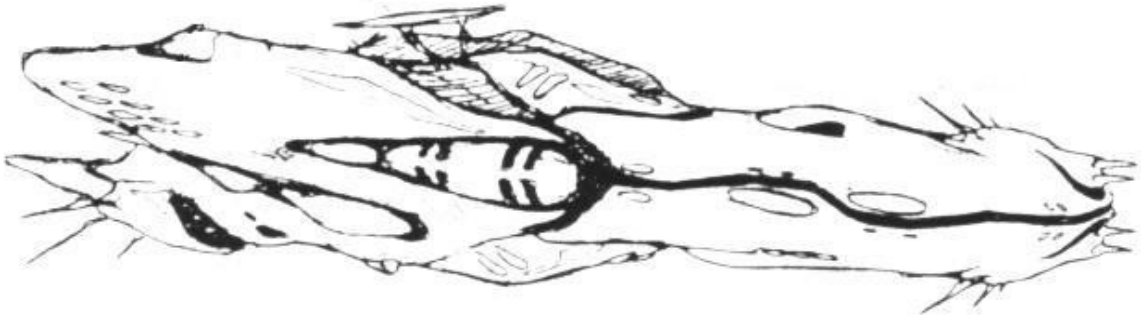
Multipliers
Engines MA 28 (x0.8), Crew Grade B (x0.6)



Programme: Designed for troop transport back and forth from ship to planet. It can transport 24 battle pods or 48 infantry.

Rin Nadow Lojm

COST: 1,523,068 CP
Manufacturer: Thuverl-Zanse 203643792nd Zentraedi Fully-Automated Armory Planet



HEIGHT: 550m
WIDTH: 380m
LENGTH: 1500m
WEIGHT: 23,000,000 tons
CREW: 475 assigned crew/personnel, 200 assigned combat soldiers. Stasis can hold 200 warriors. Total Personnel 875

Hull Class: MegaHeavy +
KILLS: 2400
ARMOR: SP 80
SPACES: 42

MA: 34 (Mach 3)
Turn: +11
Crew Grade: B (14 +1d10)

System	Kills	Range
SL Communications	50	30,000 km
HS Sensors (excessive)	200	130,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Heavy Particle Cannon	FF	5000K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 5						
Light Laser (30)	All	50K	123,597	+1	50	U
Missile Turret (30)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						

Torpedo Tube (20)	F	50K	123,597	+1	50	U

Each torpedo takes 8K to destroy. Blast 5.

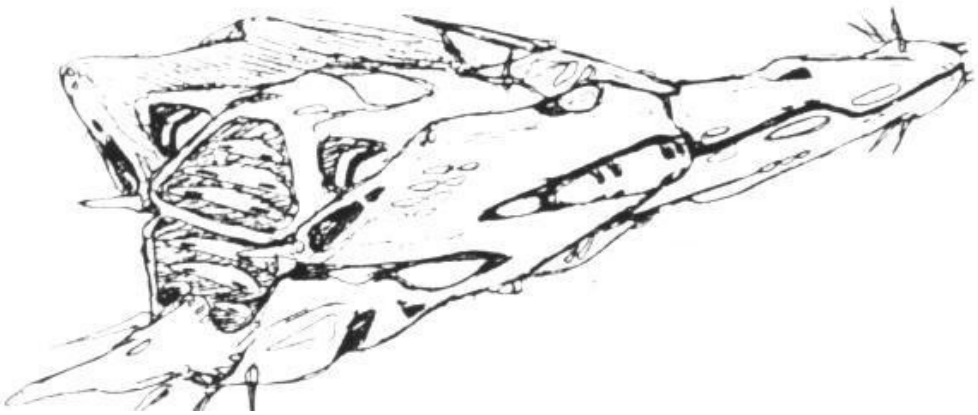
Mecha/Shuttle Compliment

Regult Pod	516
Regult Serauhaug	42
Regult Gluuhaug	20
Del Regult Scout	16
Glaug	5
Raulon-Ve	60
Nousjadeul-Ger	20
Recovery Pods	2
Reentry Pods	2
Shuttlecraft	2
Hover Platforms	20

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Antigravity Drive, Self Destruct Radio/Radar Interference Network, Life Support (675 for 5 years)

Bays
Mecha: 6 bays (720 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 5 bays (30,250 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: none

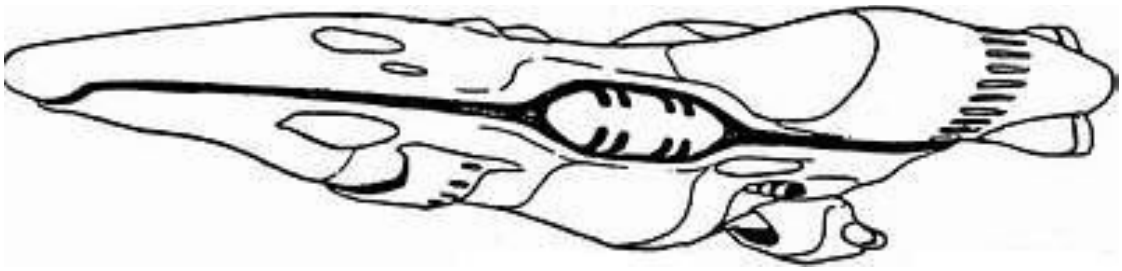
Multipliers
Engines MA 34 (x1.1), Hyperspace Drive (x1.0), Crew Grade B (x0.6)



Programme: This medium-scale gun destroyer is used in planetary bombardment and large-scale fleet-to-fleet engagement. This ship has also been listed as Thuverl-Zanse Gunship and Quiltra-Quelamitz Gunship.

Salan

COST: 316,134 CP
Manufacturer: Salan-Minor 203643792nd Zentraedi Fully-Automated Armory Planet



HEIGHT: 170m
WIDTH: 355m
LENGTH: 500m
WEIGHT: 3,800,000 tons
CREW: 200 assigned crew/personnel, 100 assigned combat soldiers. Stasis can hold 100 warriors. Total Personnel 400

Hull Class: MegaHeavy+
KILLS: 2250
ARMOR: SP 50
SPACES: 23

MA: 34 (Mach 3)
Turn: +11
Crew Grade: B (14 + 1d10)

System	Kills	Range
SL Communications	50	30,000 km
HS Sensors (excessive)	200	130,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (1)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Light Laser (12)	All	50K	123,597	+1	50	U
Missile Turret (10)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (10)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

Mecha/Shuttle Compliment

Regult Pod	150
Regult Serauhaug	15
Regult Gluuhaug	7
Del Regult Scout	3
Glaug	5
Glaug Rocket Sled	2
Raulon-Ve	15
Nousjadeul-Ger	10
Quel-Quallie	2
Recovery Pods	2
Reentry Pods	2
Shuttlecraft	2

Optional Systems
Hyperspace Communications Array, Subspace Mass Sensors, Self Destruct, Antigravity Drive
Radar/Radio Interference Network, Life Support (300 for 5 years)

Bays
Mecha: 2 bays (240 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 2 bays (12,100 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: none

Multipliers
Engines MA 34 (x1.1), Hyperspace (x1.0), Crew Grade B (x0.6)

Programme: This patrol ship is used in advance of the main fleet in engagements. This ship is also referred to as a Zentraedi Picket.

Spiral Nebula Class Mobile Command Base

COST: 173,678,560 CP
Manufacturer: Gletztzu-Glaz Zentraedi Fully-Automated Armory Planet

HEIGHT: 210 km
WIDTH: 1400 km
LENGTH: 600 km
WEIGHT: 75,250,000,000 tons

CREW: 100,000 personnel, 100,000,000 soldiers in stasis

Hull Class: MegaHeavy Excessive Scale
KILLS: 754,760
ARMOR: SP 110
SPACES: 75,269

MA: 0.5 (10 kmph)
Turn: +110
Crew Quality: A (16 + 1d10)

System	Kills	Range
MgH Communications	400	100,000 km
MgH Sensors	400	16,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Planetary Cannon	FF	500,000	6,437,376	+3	5000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 1 per 7 days						
Heavy Particle Gun (500)	All	500K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 5						
Light Laser (4,400)	All	50K	123,597	+1	50	U
Missile Turret (3000)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (200)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

Mecha/Shuttle Compliment

Regult Pod	11,000
Regult Gluuhaug	1,000
Regult Serauhaug	1,000
Del Regult	500
Glaug	1,000
Raulon-Ve Fighters	8,000
Nousjadeul-Ger	10,000
Quel-Quallie	100
Recovery Pods	100
Reentry Pods	100
Shuttlecraft	500
Hover Platforms	1,000

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Radio/Radar Interference Network
Bio-Scan Chamber, Mecha Override Control, Life Support (100,000 for indefinitely)
Cloning Facilities, Techno-Organic Advisors (4), Advanced Scientific Facilities
Techno-Organic Command Control

Bays
Mecha: 280 bays (33,600 capacity)
Crew: 8,300 bays (100,430,000 capacity)
Cargo: 1000 bays (6,050,000 ton capacity)
Medical Bay: 5 bays (60,500 capacity)
Repair Bay: 100 bays (1200 capacity)

Multipliers
Engines MA 0.5 (x-0.2), Hyperspace Drive (x1.0), Crew Grade A (x1.0)

Notes: This is the command ship used by the Neld and Burado fleets that attacked in 2036 and 2037, respectively. This is possibly a late Schism War design.

Thuverl Salan

COST: 1,624,651 CP
Manufacturer: Geteulmaqulla-Zollia 4146163-53717550th Zentraedi Fully-Automated Armory Planet

HEIGHT: 410m
WIDTH: 880m
LENGTH: 2300m
WEIGHT: 39,500,000 tons
CREW: 2840 personnel, 7840 soldiers with 9600 soldiers in stasis

Hull Class: MegaHeavy +
KILLS: 2530
ARMOR: SP 80
SPACES: 55

MA: 34 (Mach 3)
Turn: +11
Crew Grade: B (14 + 1d10)

System	Kills	Range
SL Communications	50	30,000 km
HS Sensors (excessive)	200	130,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (4)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Light Laser (35)	All	50K	123,597	+1	50	U
Missile Turret (70)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (30)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

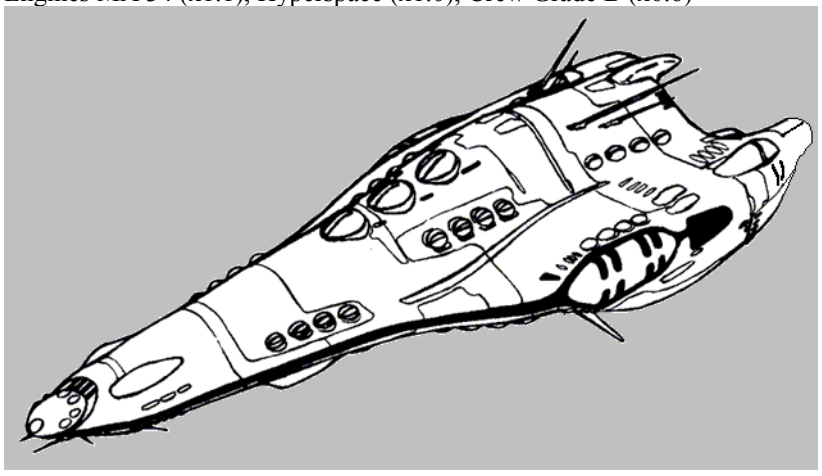
Mecha/Shuttle Compliment

Regult Pod	1400
Regult Serauhaug	130
Regult Gluuhaug	80
Del Regult Scout	30
Glaug	60
Glaug Rocket Sled	15
Raulon-Ve	200
Nousjadeul-Ger	100
Quel-Quallie	4
Recovery Pods	2
Reentry Pods	4
Shuttlecraft	2

Optional Systems
Hyperspace Communications Array, Subspace Mass Sensors, Self Destruct, Antigravity Drive
Radio/Radar Interference Network, Life Support (1150 for 10 years)

Bays
Mecha: 17 bays (2,040 capacity)
Crew: 2 bays (21,200 capacity)
Cargo: 5 bays (30,250 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: none

Multipliers
Engines MA 34 (x1.1), Hyperspace (x1.0), Crew Grade B (x0.6)



Programme: This long-lived ship series has been in use as the Zentraedi standard battleship since the later years of the Protoculture Era before the Galactic Empire's Schism War.

Zentraedi Type II Shuttle

COST: 229,098 CP
Manufacturer: Qwethwal-Ko 56343792nd Zentraedi Fully-Automated Factory Satellite

HEIGHT: ?
WIDTH: ?
LENGTH: 72m
WEIGHT: 160 tons
CREW: 4 including pilot

Hull Class: Superlight
KILLS: 175
ARMOR: SP 30
SPACES: 7

MA: 22 (Mach 1)
Turn: +1
Crew Grade: B (14 + 1d10)

System	Kills	Range
SL Communications	50	960 km
HS Class Sensors	200	804 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Light Laser (2)	FF	50K	123,597	+1	50	U
Missile Launcher (2)	FF	7K	1200	+1	50	16

Fires volleys of up to 4 per launcher

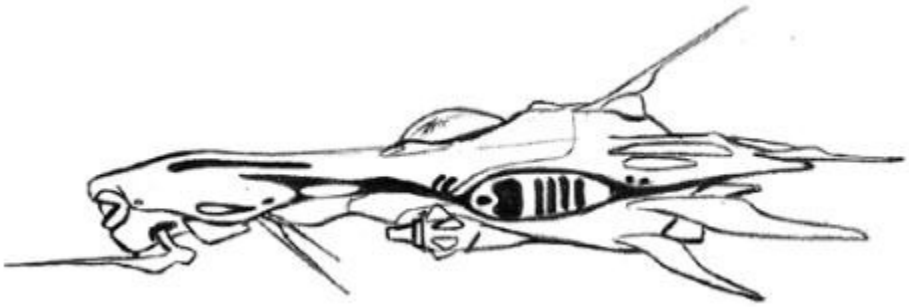
Mecha/Shuttle Compliment
None

Optional Systems
Self Destruct, Antigravity Drive

Bays
Mecha: none
Crew: 1 bay (4 capacity)
Cargo: none

Medical Bay: none
Repair Bay: none

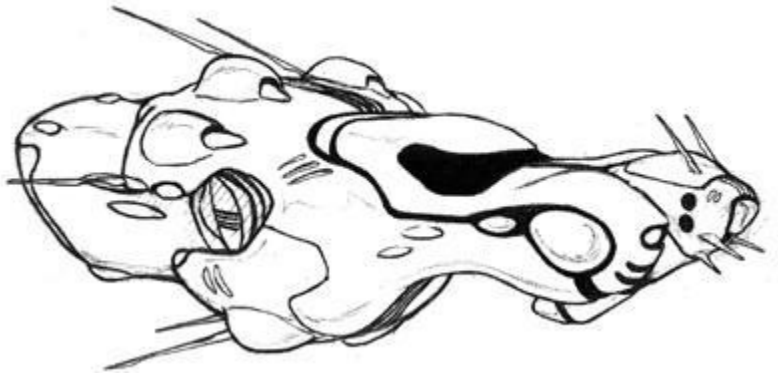
Multipliers
Engines MA 22 (x0.6), Hyperspace (x1.0), Crew Grade B (x0.6)



Programme: This is a lightly armed transport for ferrying important personnel between ships. Also called Zentraedi Launch.

Zentraedi Troop Carrier

COST: 21,440 CP
Manufacturer: various Fully-Automated Armory Planets



HEIGHT: ?
WIDTH: 123m
LENGTH: 183m
WEIGHT: 35,000 tons ?
CREW: 2 including pilot, see troop compliment below

Hull Class: Striker
KILLS: 600
ARMOR: SP 40
SPACES: 6

MA: 22 (Mach 1)
Turn: +2
Crew Grade: B (14 + 1d10)

System	Kills	Range
SL Communications	50	960 km
HS Class Sensors	200	804 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
None						

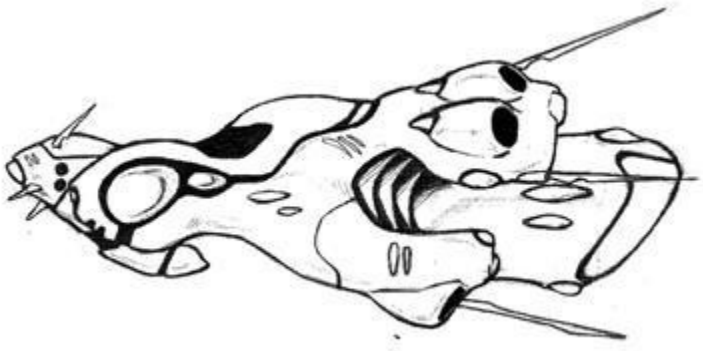
Mecha/Shuttle Compliment
Carries one of the following:

Nousjadeul-Ger	8
Regult	12
Zentraedi Infantry	20

Optional Systems
Self Destruct, Antigravity Drive

Bays
Mecha: 3 bays (15 capacity)
Crew: 1 bay (2 capacity)
Cargo: none
Medical Bay: none
Repair Bay: none

Multipliers
Engines MA 22 (x0.6), Hyperspace (x1.0), Crew Grade B (x0.6)



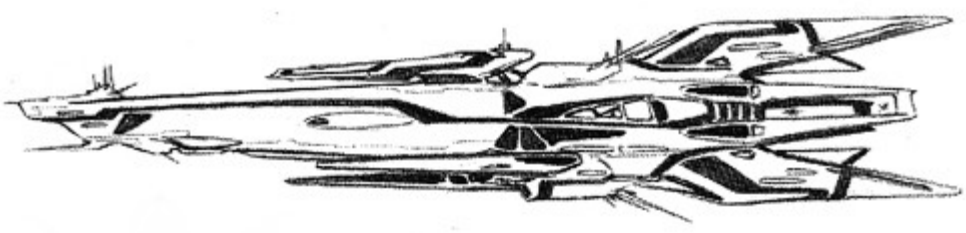
Programme: This is a lightly armed troop transport for getting a small group of troops into a critical area.

Notes: I could find no tonnage listing, so I estimated the hull class based on it's size and function.

Meltrandi Vessels

Meltran Battleship

COST: 2,050,157 CP
Manufacturer: Gosges-Siore 2703307th Meltrandi Fully-Automated Armory Planet



HEIGHT: 533m
WIDTH: 690m

LENGTH: 2426m
WEIGHT: 132,000,000 tons
CREW: 4,000 personnel and soldiers

Hull Class: MegaHeavy+
KILLS: 3490
ARMOR: SP 110
SPACES: 151

MA: 28 (Mach 2)
Crew Grade: A (16+1d10)

System	Kills	Range
LH Communications	200	18,000 km
AH Sensors	300	3,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Heavy Particle Cannon	FF	5000K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 5						
Superheavy Laser (3)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Light Laser (20)	All	50K	123,597	+1	50	U
Missile Turret (40)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (30)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

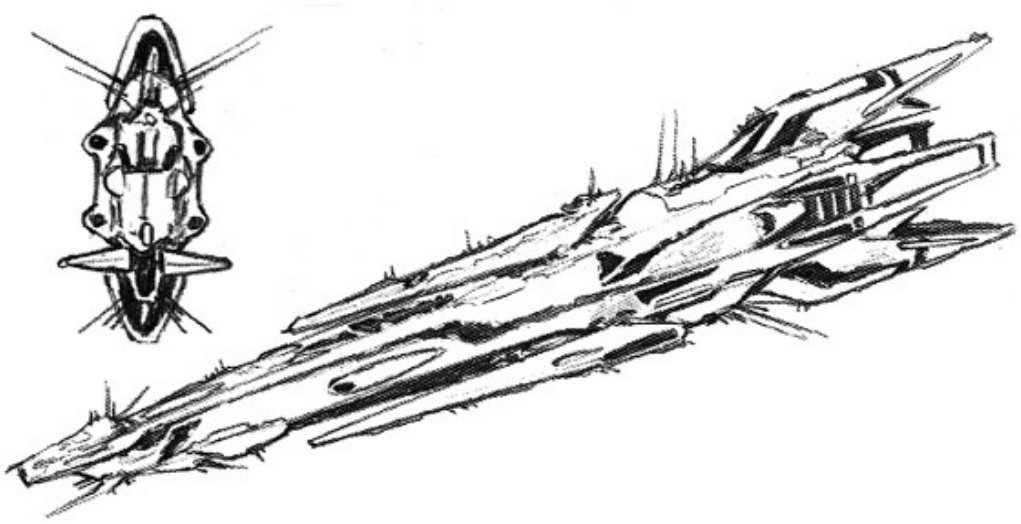
Mecha/Shuttle Compliment

Queadlunn-Rau	2400
Quel-Quallie	4
Recovery Pods	5
Reentry Pods	8
Shuttlecraft	8
Hover Platforms	200

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (10,000 for 20 years)
Anti-Gravity System

Bays
Mecha: 22 bays (2640 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 10 bays (60,500 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 2 bays (240 capacity)

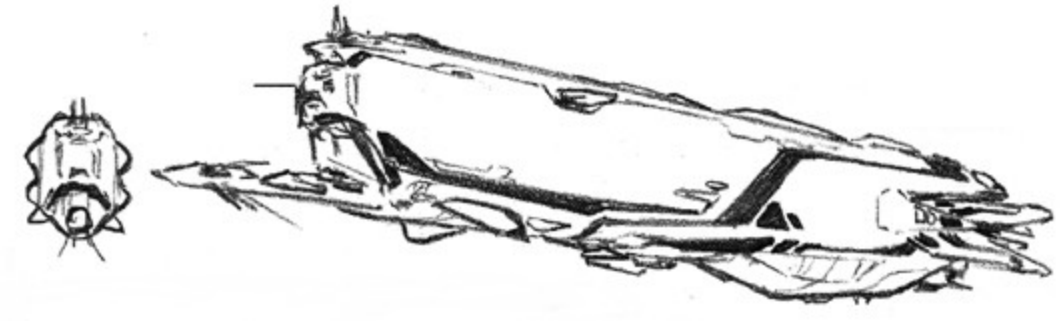
Multipliers
Space Fold (x1.0), Engines MA 24 (x0.8), Crew Grade A (x1.0)



Notes: The Meltrandi Standard Battleship, is the main frontline unit for the Laplamiz Space Fleet. Used in great numbers, this unit is equipped with moderate fighter cover, laser and missile batteries, and a heavy particle beam cannon.

Meltran Carrier

COST: 1,227,628 CP
Manufacturer: Esokolara 3577455th Meltrandi Fully-Automated Armory Planet



HEIGHT: 685m
WIDTH: 450m
LENGTH: 2885m
WEIGHT: 159,000,000 tons
CREW: 5,000 personnel and soldiers

Hull Class: MegaHeavy+
KILLS: 3760
ARMOR: SP 110
SPACES: 178

MA: 28 (Mach 2)
Crew Grade: A (16+1d10)

System	Kills	Range
LH Communications	200	18,000 km
AH Sensors	300	3,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (1)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Light Laser (25)	All	50K	123,597	+1	50	U
Missile Turret (80)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (40)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

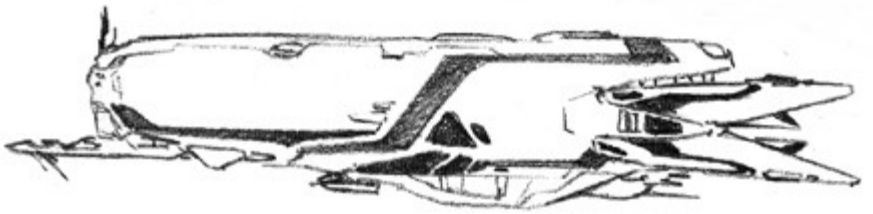
Mecha/Shuttle Compliment

Queadlunn-Rau	3000
Quel-Quallie	12
Recovery Pods	10
Reentry Pods	20
Shuttlecraft	12
Hover Platforms	400

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (5,000 for 20 years) Hyperspace Engine, Anti-Gravity System, Radio/Radar Interference Network

Bays
Mecha: 29 bays (3480 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 10 bays (60,500 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 2 bays (240 capacity)

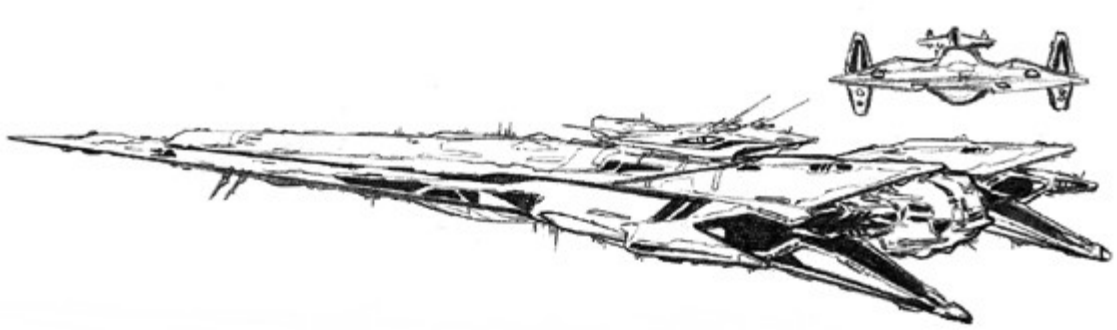
Multipliers
Space Fold (x1.0), Engines MA 24 (x0.8), Crew Grade A (x1.0)



Notes: As the second largest ship in the Meltran arsenal, and especially with its cadre of Queadlunn-Rau the Meltran Carrier is one of the deadliest ships that the Meltran Zentraedi have in the field. In combat it commonly holds back to permit mecha to launch in safety and out of the enemies incoming fire, and be retrieved in the same manner. However if the Meltran Carrier does come into the battle directly it is a sight to be feared as its guns open fire and hundreds upon hundreds of Meltran in the powerful Queadlunn-Rau power armor disgorge from its hanger bays.

Meltran Flagship

COST: 2,297,898 CP
Manufacturer: Shebaro-Gar 8744650^{th} Meltrandi Fully-Automated Armory Planet



HEIGHT: 700m
WIDTH: 750m
LENGTH: 3860m
WEIGHT: 182,000,000 tons
CREW: 4000 assigned crew/personnel, 4660 assigned combat soldiers usually with another 6000 or more withdrawn from stasis as needed. Stasis can hold 28,900 warriors. Total Personnel 37,560.

Hull Class: MegaHeavy+
KILLS: 3990
ARMOR: SP 110
SPACES: 201

MA: 28 (Mach 2)
Crew Grade: A (16+1d10)

System	**Kills**	**Range**
LH Communications	200	18,000 km
AH Sensors	300	3,000 km

Weapon	**Arc**	**DMG**	**Range**	**WA**	**Kills**	**Payload**
Superheavy Laser (4)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Light Laser (90)	All	50K	123,597	+1	50	U
Missile Turret (200)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (60)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

Mecha/Shuttle Compliment

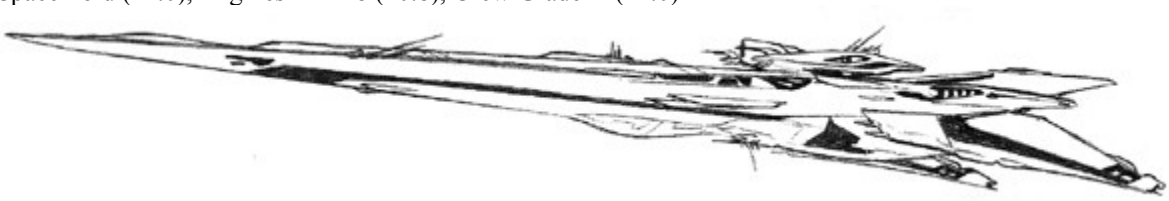
Queadlunn-Rau	4000
Quel-Quallie	12
Recovery Pods	10
Reentry Pods	20
Shuttlecraft	12
Hover Platforms	400

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (38,000 for 20 years) Hyperspace Engine, Anti-Gravity System, Mecha Override System, Radio/Radar Interference Network Bio-Scan Chamber

Bays
Mecha: 38 bays (4560 capacity)
Crew: 1 bay (12,100 capacity)

Cargo: 10 bays (60,500 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 3 bays (360 capacity)

Multipliers
Space Fold (x1.0), Engines MA 28 (x0.8), Crew Grade A (x1.0)

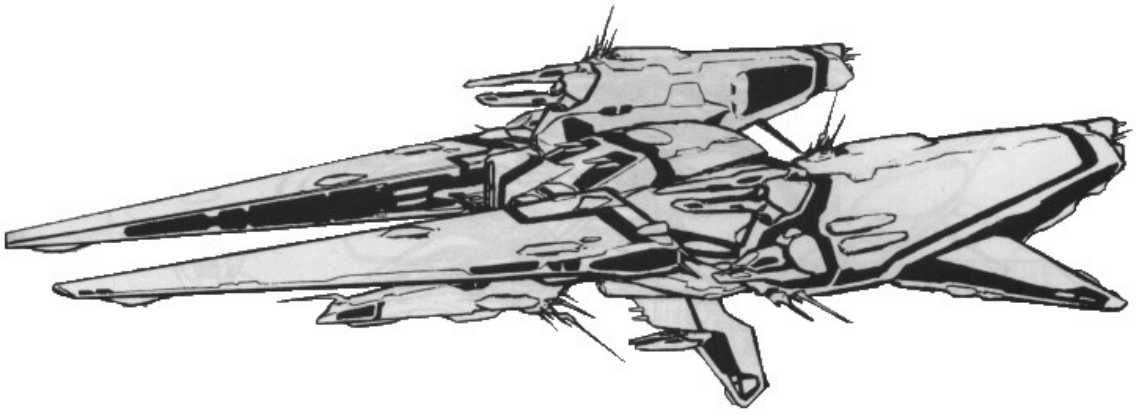


Detachable Command Section
Kills: 600
Armor: SP 110
Other: MA 28, LH Communications, AH Sensors, Anti-Gravity System, Subspace Mass Sensors, Hyperspace Communications Array, Life Support, 1 Mecha Bay (100 Queadlunn-Rau), 5 Light Lasers, 10 Missile Turrets, 5 Torpedo Tubes
Notes: Weapons and mecha bay are subtracted from the main ship's totals when separated.

Notes: The Detachable Command Section is where the central command and control facilities are located. This section can detach from the rest of the ship and function independently of it. The Command section can attain the same speed as the rest of the ship, and has a small defensive complement of lasers, and missiles. It also has a fighter complement of 100 Queadlunn-Rau. Typically, the command section will be left in the rear battle lines in order to allow the fleet commander the ability to coordinate the entire battle instead of worrying about her ship. The rest of the flagship can bring its awesome firepower and sensor ability to bear in the front lines, and relay all data back to the command section.

Meltran Gunship

COST: 2,167,197 CP
Manufacturer: Usakigar 8799677th Meltrandi Fully-Automated Armory Planet



HEIGHT: 377m
WIDTH: 410m
LENGTH: 1180m
WEIGHT: 59,000,000 tons
CREW: 2,000 personnel and soldiers (400 assigned crew/personnel, 100 assigned combat soldiers. Stasis can hold 250 warriors. Total Personnel 750.)

Hull Class: MegaHeavy+

KILLS: 2760
ARMOR: SP 110
SPACES: 78

MA: 28 (Mach 2)
Crew Grade: A (16+1d10)

System	Kills	Range
LH Communications	200	18,000 km
AH Sensors	300	3,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Heavy Particle Cannon	FF	5000K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 5						
Superheavy Laser (3)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Light Laser (20)	All	50K	123,597	+1	50	U
Missile Turret (40)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (20)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

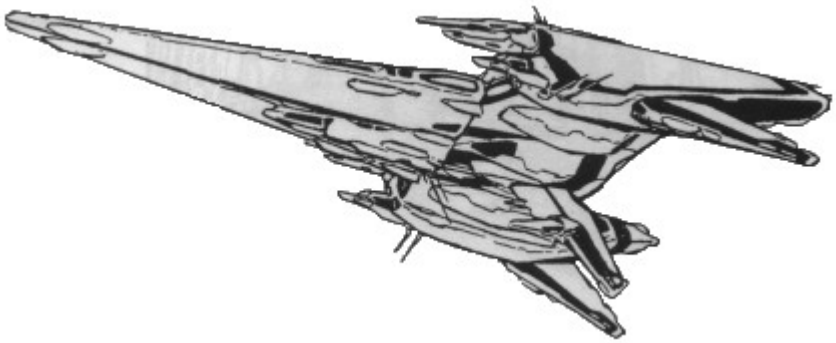
Mecha/Shuttle Compliment

Queadlunn-Rau	1100
Quel-Quallie	3
Recovery Pods	3
Reentry Pods	4
Shuttlecraft	8
Hover Platforms	100

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (10,000 for 20 years)
Hyperspace Engine, Anti-Gravity System

Bays
Mecha: 120 bays (1200 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 1 bay (6050 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

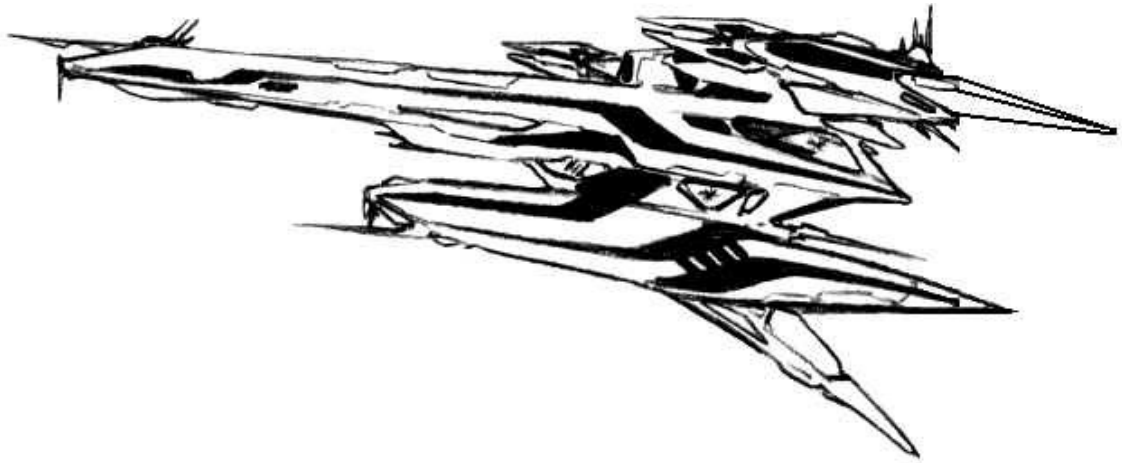
Multipliers
Space Fold (x1.0), Engines MA 24 (x0.8), Crew Grade A (x1.0)



Notes: The gunship provides the Meltran fleet with superior firepower, as it is the only Meltran ship equipped with a heavy particle beam cannon.

Meltran Heavy Frigate

COST: 1,271,190.2
Manufacturer: Optobectra 194743215th Meltrandi Fully Automated Armory Planet



HEIGHT: 853m
WIDTH: 700m
LENGTH: 2032m
WEIGHT: 77,000,000 tons
CREW: 3,400 personnel and soldiers

Hull Class: MegaHeavy+
KILLS: 2940
ARMOR: SP 110
SPACES: 76

MA: 40 (Mach 4)
Crew Grade: A (16+1d10)

System	Kills	Range
LH Communications	200	18,000 km
AH Sensors	300	3,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (2)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Light Laser (12)	All	50K	123,597	+1	50	U
Missile Turret (90)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (30)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

Mecha/Shuttle Compliment

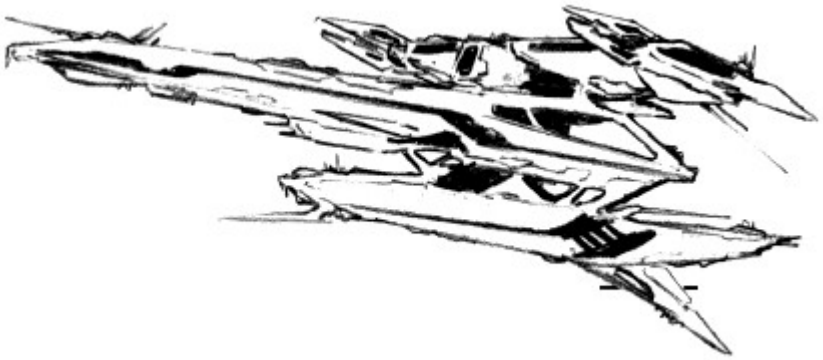
Queadlunn-Rau	2000
Quel-Quallie	5
Recovery Pods	10
Reentry Pods	5

Shuttlecraft	8
Hover Platforms	120

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (3,000 for 5 years)
Hyperspace Engine, Anti-Gravity System

Bays
Mecha: 18 bays (2160 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 10 bays (60,500 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 3 bays (360 capacity)

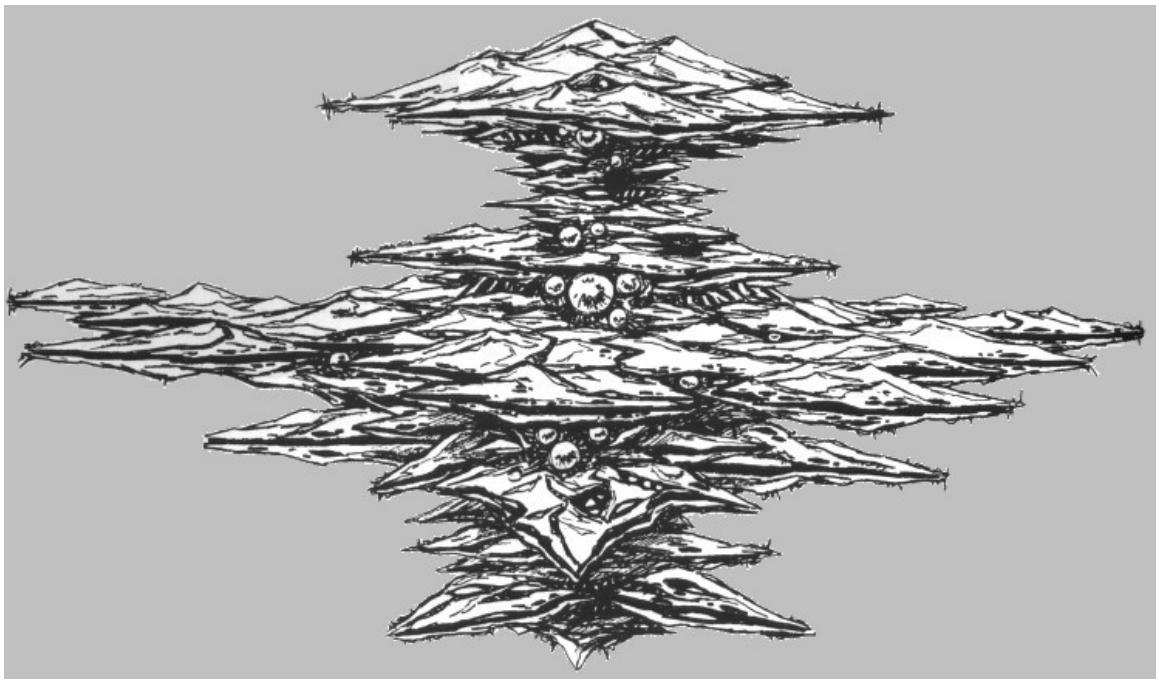
Multipliers
Space Fold (x1.0), Engines MA 40 (x1.7), Crew Grade A (x1.0)



Notes: The Meltrandi Heavy Frigate is a medium size warship and a mainstay of the Meltran Fleets commonly serving as a picket ship along side the much smaller scout ship. Despite it being smaller than many of the other Meltran ships it is still larger than any Earth constructed ship and slightly larger than the Zentran Thuverl Salan Destroyer allowing it to more than capably handle itself in any battle. The Heavy Frigate like all Meltran vessels, has plenty of ship borne weapons, and has hundreds of Queadlunn-Rau in addition making it more than a match for any comparably sized vessel.

Meltran Command Base

COST: 106,233,576 CP
Manufacturer: Mosuwaru-Ko Meltrandi Fully-Automated Armory Planet



HEIGHT: 270 km
WIDTH: ?
LENGTH: 500 km
WEIGHT: 70,600,000,000 tons
CREW: 100,000 crew and has 100,000,000 Meltran in stasis

Hull Class: MegaHeavy Excessive Scale
KILLS: 708,910
ARMOR: SP 110
SPACES: 70,621

MA: 0.5 (10 kmph)
Turn: +11
Crew Grade: A (16+1d10)

System	**Kills**	**Range**
LH Comm. (Excessive)	2000	180,000 km
AH Sensors	300	30,000 km

Weapon	**Arc**	**DMG**	**Range**	**WA**	**Kills**	**Payload**
Planetary Assault Beam (1)	FF	500,000K	6,437,376	+3	5000	U
Wide Beam (330 hex), Ultra-Beam, Clip 2, Warm-up (12 days)						
Superheavy Laser (500)	All	500K	6,437,376	+1	500	U
Warmup 1						
Light Laser (4,400)	All	50K	250,000	+1	50	U
Missile Launcher (3,000)	All	12K	127^2	+2	50	U
Long Range						

Mecha/Shuttle Compliment

Queadlunn-Rau	5,000
Queadlunn-Nona	10,000
Quel-Quallie	100
Recovery Pods	100
Reentry Pods	500

Shuttlecraft 500

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (100,000 for indefinitely) Space Fold Engine, Anti-Gravity System, Mecha Override Control, Techno-Organic Advisors (4) Techno-Organic Command Control, Bio-Scan Chamber, Advanced Scientific Facilities

Bays
Mecha: 2 bays (24,200 capacity)
Crew: 8,300 bays (100,430,000 capacity)
Cargo: 1000 bays (6,050,000 ton capacity)
Medical Bay: 2 bays (24,200 capacity)
Repair Bay: 100 bays (1200 capacity)

Multipliers: MA 0.5 (x-0.2), Space Fold (x1.0), Crew Grade A (x1.0)

Notes: This is the Meltran counterpart to the Zentran mobile command base.

Meltran Scout

COST: 345,144.8 CP
Manufacturer: Quitolera 194743745th Meltrandi Fully-Automated Armory Planet

HEIGHT: 170m
WIDTH: 91m
LENGTH: 270m
WEIGHT: 26,000,000 tons
CREW: 310 personnel and soldiers (200 assigned crew/personnel, 50 assigned combat soldiers. Stasis can hold 50 warriors. Total Personnel 300.)

Hull Class: MegaHeavy+
KILLS: 2430
ARMOR: SP 60
SPACES: 55

MA: 40 (Mach 4)
Crew Grade: A (16+1d10)

System	Kills	Range
LH Communications	200	18,000 km
AH Sensors	300	3,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (1) Warm Up 1	F	500K	6,437,376	+1	500	U
Light Laser (3)	All	50K	123,597	+1	50	U
Missile Turret (8)	All	12K	127^2	+1	50	U

Long Range, Blast 2, Fires volleys of up to 10 per launcher

Torpedo Tube (10)	F	50K	123,597	+1	50	U

Each torpedo takes 8K to destroy. Blast 5.

Mecha/Shuttle Compliment

Queadlunn-Rau	250
Quel-Quallie	2
Recovery Pods	0
Reentry Pods	1
Shuttlecraft	2
Hover Platforms	10

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (3,000 for 20 years)
Space Fold Engine, Anti-Gravity System

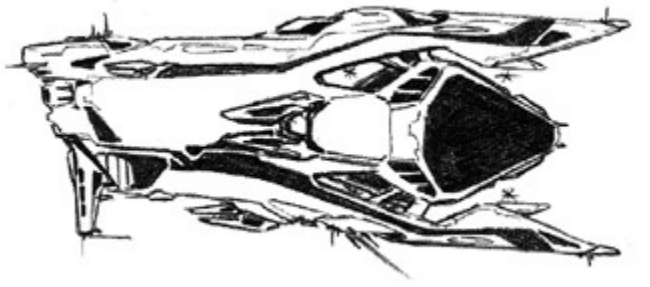
Bays
Mecha: 3 bays (360 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: none
Medical Bay: none
Repair Bay: none

Multipliers
Engines MA 40 (x1.7), Space Fold (x1.0), Crew Grade A (x1.0)

Notes: The Meltrandi Scout Ship, sometimes referred to as a pocket battleship is used to scout out potential enemy's and report back to the main fleet. This particular model of Meltran ship is the smallest ship in the Meltran Fleets arsenal, and as a result it is lightly armed. When the scout ship expects an armed conflict to arise, they are often deployed in teams, or with a Gunship to act as escort. These ships can also function close in defense units in a fleet formation, protecting the larger ships from concentrated missile fire from opposing fleets. Their small size means that many of them can be positioned around a larger warship, such as a flagship.

Meltran Troopship

COST: 907,801 CP
Manufacturer: ?? Meltrandi Fully-Automated Armory Planet



HEIGHT: 750m
WIDTH: 750m
LENGTH: 1750m
WEIGHT: 100,000,000 tons
CREW: 3,500 personnel and soldiers

Hull Class: MegaHeavy+

KILLS: 3170
ARMOR: SP 110
SPACES: 119

MA: 28 (Mach 2)
Crew Grade: A (16+1d10)

System	Kills	Range
LH Communications	200	18,000 km
AH Sensors	300	3,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (1)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Light Laser (15)	All	50K	123,597	+1	50	U
Missile Turret (50)	All	12K	127^2	+1	50	U
Long Range, Blast 2, Fires volleys of up to 10 per launcher						
Torpedo Tube (40)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

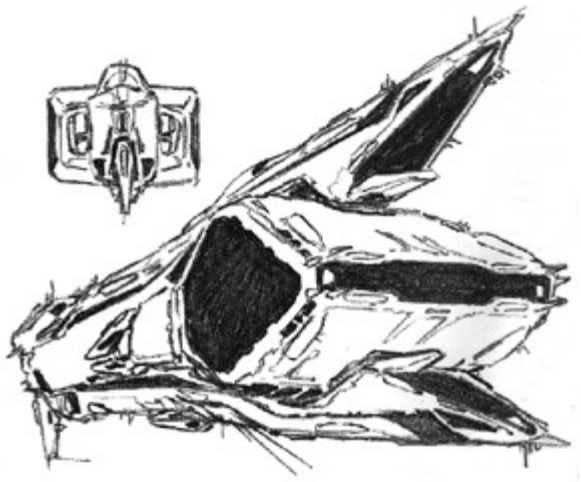
Mecha/Shuttle Compliment

Queadlunn-Rau	2200
Quel-Quallie	8
Recovery Pods	6
Reentry Pods	12
Shuttlecraft	8
Hover Platforms	200

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (5,000 for 20 years)
Hyperspace Engine, Anti-Gravity System

Bays
Mecha: 21 bays (2520 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 10 bays (60,500 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 2 bays (240 capacity)

Multipliers
Space Fold (x1.0), Engines MA 24 (x0.8), Crew Grade A (x1.0)

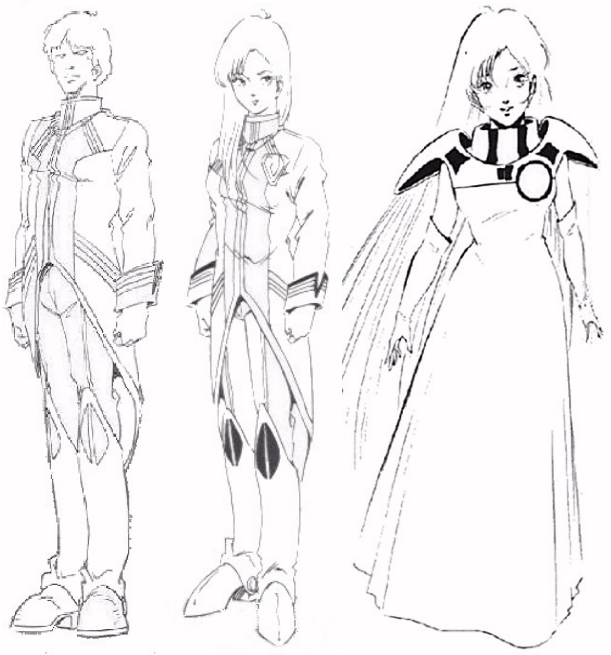


Notes: As the second largest ship in the Meltran arsenal, and especially with its cadre of Queadlunn-Rau, the Meltran troop ship is one of the deadliest ships that the Meltran Zentraedi have in the field. In combat it commonly holds back to permit mecha to launch in safety and out of the enemies incoming fire, and be retrieved in the same manner. However if the Meltran troop ship does come into the battle directly it is a sight to be feared as its guns open fire and hundreds upon hundreds of Meltran in the powerful Queadlunn-Rau power armor disgorge from its hanger bays.

Chapter 8 – Zentraedi Equipment

The Zentraedi forces did not have a wide range of equipment as did the UN military. The Protoculture designed what they felt their proxy weapons needed, and stuck with the design. Without technicians the Zentraedi forces never upgraded or altered their equipment.

Zentraedi Uniforms



Above is the standard uniform for soldiers and low-ranking officers for both Zentran and Meltran forces. Both incorporate a high collared jacket with long coattails worn over trousers. Their boots are knee-high and armored. On the right is the formal dress uniform of a Meltran ace pilot (as seen in the DYRL movie).

The above are all uniforms for ship command staff, which can be recognized by the stiff collar. Fleet commanders also will typically wear a cape to indicate their status. Meltran commanders wear a looser tunic-style shirt rather than the long jacket with coattails.

On the left is the uniform of a records officer (Zentraedi science officer), which is a standard uniform with a scarf to indicate their position (although records officers are also allowed a long robe similar to that of high command). The middle is a Zentraedi main fleet commander's uniform. It uses a smock-like overcoat over the standard uniform. Above right shows the robes of a supreme commander such as Boddole Zer. Below is a variation of the supreme commander's robes from a differing fleet.

Meltran Flight Suit

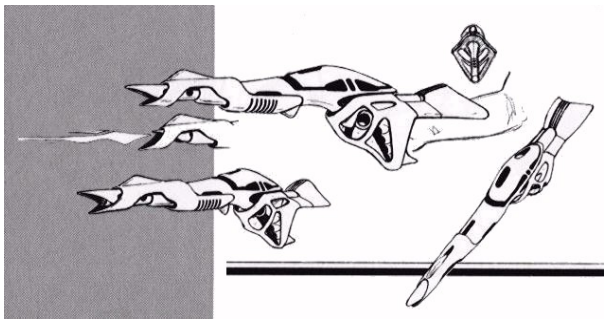
Zentraedi battle pods and power armor are designed to allow the pilot to wear light armor inside, however, the Queadlunn-Rau is designed to fit much closer to the pilot's form and requires particular connections to the techno-organic controls. Meltran pilots are all issued an environmentally sealing flight suit to wear. It provides only the most basic protection. The flight suit comes with a helmet and when attached, the suit is environmentally sealed. This suit has no life support system or beacon.

Kills 2, B-Mod 0

Laser Pistol

This is the standard sidearm issued to Zentraedi officers and ace pilots. The laser pistol has two settings, light and heavy. The handle has a hand guard so that the officer can use it to pistol whip if needed.

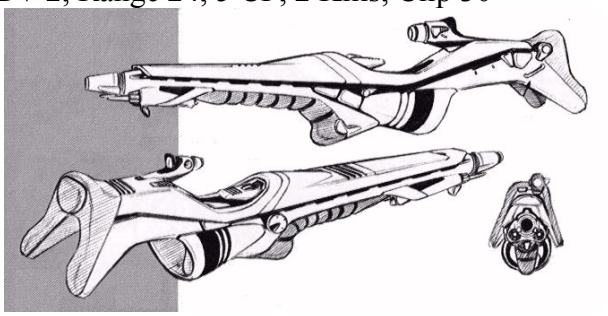
Damage 1K or 10d6 Hits, Range 12, 2 CP, 1 Kill, Clip 20



Laser Rifle

This is the standard rifle issued to Zentraedi pilots. Zentraedi piloting either of the battle pods are not issued one, although those piloting the Nousjadeul-Ger armor do carry one.

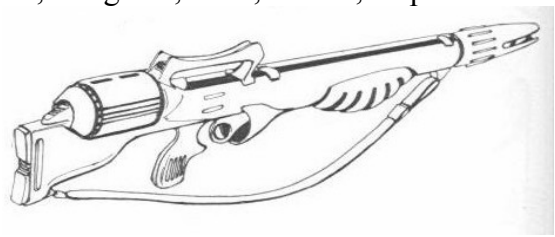
Damage 1K, BV 2, Range 24, 5 CP, 2 Kills, Clip 30



Assault Rifle

This is a heavier rifle used by Zentraedi infantry.

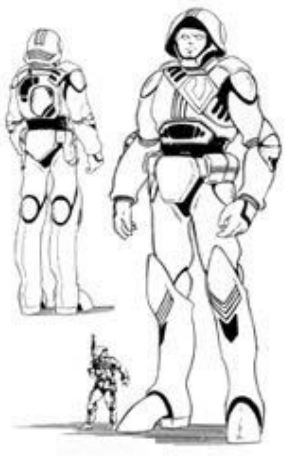
Damage 1K, BV 4, Range 24, 7 CP, 2 Kills, Clip 40



Light Armor

Light armor is the standard issue to Zentraedi battle pod pilots. It provides moderate protection. The armor comes with a helmet and when attached, the suit is environmentally sealed. This armor has no life support system or beacon.

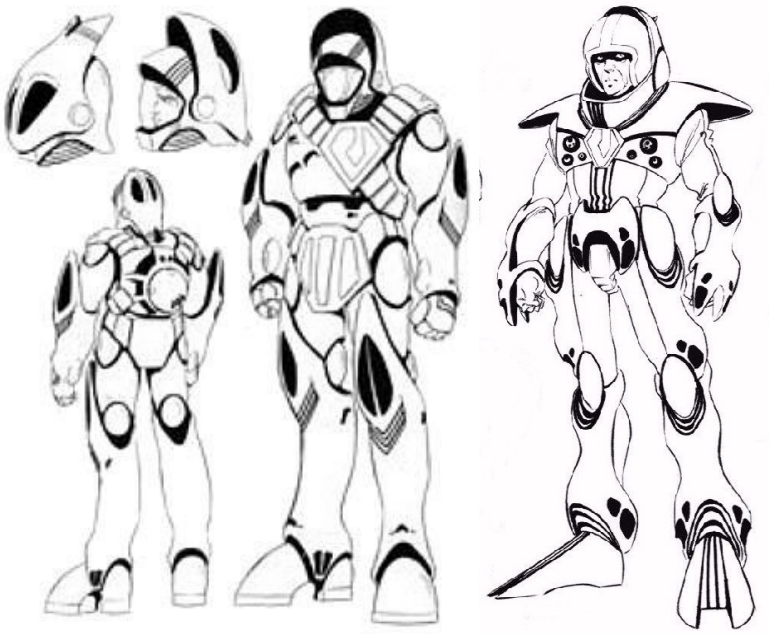
SP 2, Kills 3, B-Mod 1



Heavy Armor

Heavy armor is issued to Zentraedi infantry and is also worn sometimes by high-ranking officers. The armor comes with a helmet and when attached, the suit is environmentally sealed. This armor about 1 hour of air when sealed, but has no other life support or beacon.

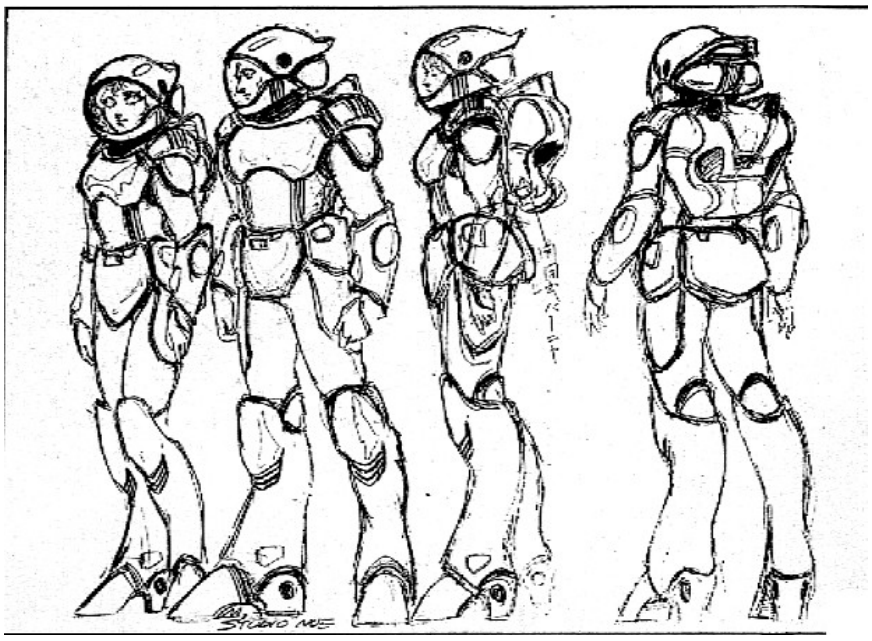
SP 4, Kills 5, B-Mod 2



The above right is the basic Zentraedi light armor, with the heavier combat armor on the left.

Early Zentraedi Armor

This armor represents an earlier style of armor used in the early years of the Schism War. It has the same stats as “modern” light and heavy armor.



Chapter 9 – Varauta Mecha & Equipment

Varauta variable fighters have all of the same features as the UN Spacy versions they copied/modified from, with some of their own systems added in. None of the Varauta mecha have the holographic display cockpit or pinpoint barrier system.

Spiritia Absorption Beam

This is a specialized beam weapon that will drain the Spiritia from the target. It will drain 10 Spiritia per round from a target. This is typically mounted in the head of the mecha.

Range 1, 1.7 CP, 1 Kill, 1 Space

Spiritia Storage Cell

This works not unlike an energy pool that stores Spiritia stolen from victims. The cell will hold a maximum of 500 points of Spiritia.

1 Space, 5 CP

Spiritia Imager

This is a specialized sensor that detects Spiritia energy, quantity, quality, and overlays a targeting gauge over the target for aiming the Spiritia absorption beam. It grants an additional +1 WA with a spiritia absorption beam.

1 Space, 2 CP

Capture Sphere

This creates a miniature force field bubble around up to 4 human sized targets. The sphere itself can only withstand 1 Kill of damage. The sphere will maintain air for the subjects for up to 4 hours, and is environmentally sealed as well as radiation shielded.

1 Space, 5 CP (usually paired one in each arm)

Varauta Standard Gunpod

All Varauta variable fighters are equipped with a standardized gunpod. Like most UN gunpods (on which this is based), the ammo clip port is in the butt of the weapon.

1K, Range 24, BV 3, +1 WA, Ammo 16, All-Purpose, CP 42.9 [6.9 per clip]

Spiritia Gun Pod

This is an older, less compact version of the spiritia draining beam built into most current Varauta mecha. It will drain 20 Spiritia per round from a target (or 200 per round against Protodeviln).

Range 24, 30 CP, 3 Kills, 1-handed

Soundwave Neutralization Device

Basically a sophisticated “white noise” generator that was designed to counter the songs of Nekkei Basara during the later part of the Varauta/UN Spacy war by Gavil. The system can only counter one spiritia attacker per round, but can be switched as needed. This unit was only ever seen on the Zaubergeran. While this device can blank out the “noise” of anima spiritia (and thus stop spiritia disruption), it cannot stop any of the anima spiritia’s other powers.

1 Space, 10 CP

Audio Defense System

Sound protective gear, designed by Gavil, for the Minor Protodeviln as well as the Major Protodeviln. Designed to protect the Protodeviln from the 'noise' of Anima Spiritia, however this unit can protect against noise, but cannot protect against the effects of Anima Spiritia.

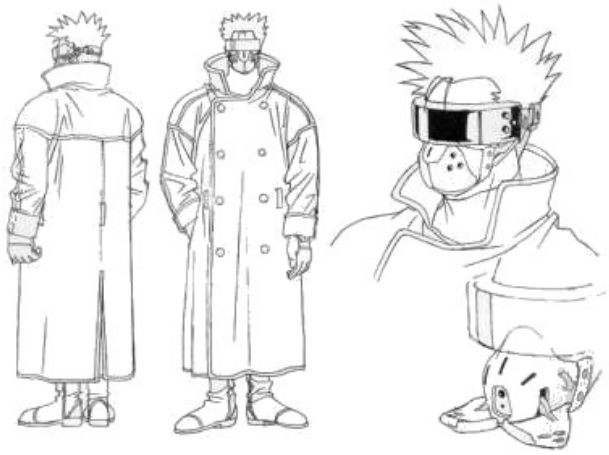
Minor Protodeviln Size: 20 Hits, 2 CP

Major Protodeviln Size: 10K, 25 CP

“Vampire” Spiritia Headgear

Portable Spiritia Imager, worn by the Varauta Infiltrator. This visor detects Spiritia and its level of 'purity'. Mounted on the chin-piece is a Spiritia Absorption Beam, used to collect Spiritia for their Protodeviln masters. This is a smaller version of the Spiritia Absorption Beam that is mounted on all of the Varauta mecha. This has 2 settings – it can drain 5 spiritia per round from a target, or fire a stun beam (BOD check, difficulty 15) that can incapacitate a man-sized target for 10 minutes. Both beams have a range of 10m. If the drain beam hits the target anyplace other than their head, it simply stings for a moment.

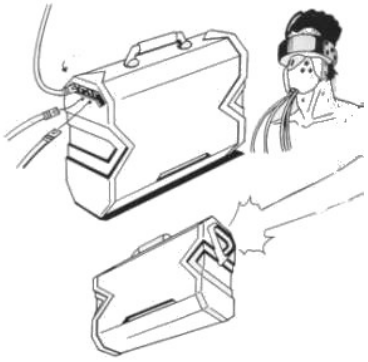
20 Hits, 1 CP



Portable Spiritia Storage Cell

This is a briefcase-sized cell used in conjunction with the spiritia headgear (see above). It can store up to 100 spiritia, and can be released through a lens on the back at a rate of 10 spiritia per round.

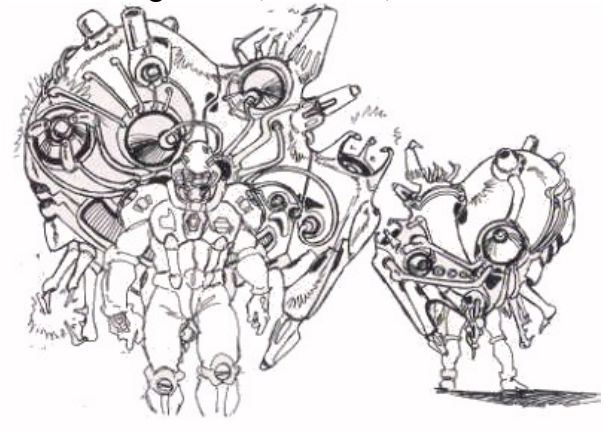
30 Hits, 1 CP



Spiritia Collector (large version)

Large backpack type of spiritia collector unit, that can store large amounts of Spiritia which can then be released in large amounts for Protodeviln. Gigile used one of these units to release a large amount of stored spiritia that he had accumulated from the previous battles with the Macross 7 fleet to release/awaken the Protodeviln, Sivil. This unit can drain up to 10 spiritia per round, release up to 50 per round, and can store up to 700.

Range 150m, 100 Hits, 5 CP



Varauta Laser Pistol

This is issued to all Varauta personnel. The laser pistol appears to be somewhat bulky, although it is very accurate and far more powerful than most UN personal weapons.

Clip: 20, Damage 5d6 hits, BV 1, Range 100m, WA +1, 5 CP, Cost 5000 credits if available to the UN military

Varauta Carbine Laser Rifle

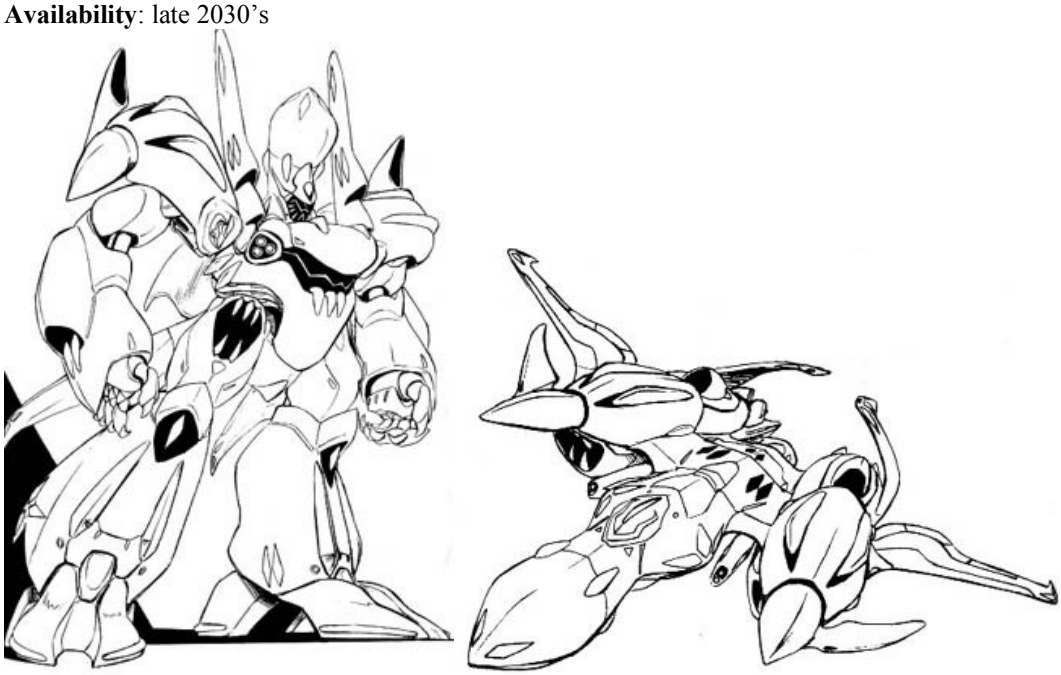
This is a field combat weapon assigned to Varauta infantry.

Clip: 20, Damage 10d6 hits, BV 2, Range 100m, WA +1, 10 CP, Cost 12,000 credits if available to the UN military

Varauta Mecha

AZ-130 Pantzerzorene

COST: 838 CP (+56.7 CP for loaded gunpod and 2x spare clip; +717.6 CP for missiles)
Availability: late 2030's



HEIGHT:
17.73m in soldier configuration.
WIDTH:
22.15m in attacker configuration
LENGTH:
17.78m in attacker configuration
WEIGHT:
15,500 kg
G-Limits:
+35.0 to -20.5

Mode	MV	Land MA	Fly MA
Battroid	-0	6 (300m/round)	28 (1400m/round)
Gerwalk	-1	3 (150m/round)	42 (2100m/round)
Fighter	-2	0	56 (2800m/round)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MW	12	15	HS	5	5
Head		STR	3	4	MS	4	4
Right Arm		MS	5	6	MS	4	4
Left Arm		MS	5	6	MS	4	4
Right Leg		HS	6	7	HS	5	5
Left Leg		HS	6	7	HS	5	5
Right Wing		LW	2	3	STR	3	3
Left Wing		LW	2	3	STR	3	3

Thrusters	Location	MA
Thruster	Right Leg	14
Thruster	Left Leg	14

Sensors	Location	Kills	Sensors	Communications
MS Class	Head	1	7 km	1000 km
Backup	Torso	2	1 km	300 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	3K	Melee	+0	1	U	Quick, Handy
35mm Cannon	Torso	1K	24	+1	1	-	BV3, All Purpose, Linked
Ammo						40	AP
35mm Cannon	Torso	1K	24	+1	1	-	BV3, All Purpose, Linked
Ammo						40	AP
Pulse Laser	Torso	2K	24	+1	2	U	BV3, All Purpose, Linked
Pulse Laser	Torso	2K	24	+1	2	U	BV3, All Purpose, Linked
SRM Rack	Right Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Right Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Right Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Right Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Left Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Left Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Left Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Left Arm	5K	64	+1	2	6	CMV, Crosslinked
IRM Rack	Right Leg	7K	1200	+1	4	8	Crosslinked
IRM Rack	Left Leg	7K	1200	+1	4	8	Crosslinked
Gunpod	1-Handed	1K	24	+1	1	-	BV3, All Purpose
Ammo						16	AP
Gunpod	1-Handed	1K	24	+1	1	-	BV3, All Purpose
Ammo						16	AP

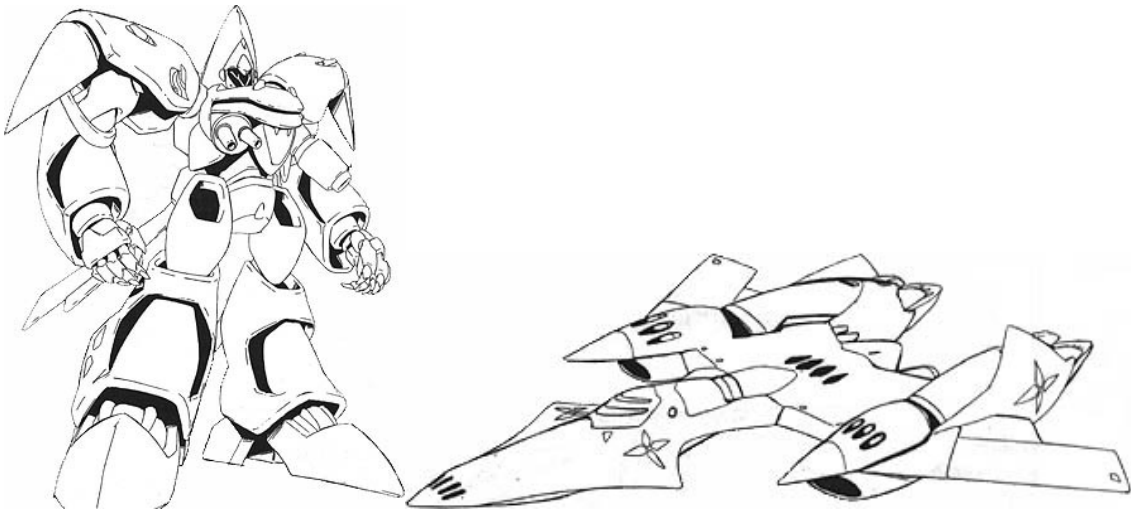
Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod, Self Destruct Hardpoints (4 on Main Body, 2 per Wing), Spiritia Absorption Beam, Spiritia Storage Cell Spiritia Defense System, Armored Canopy

Multipliers
Environmentals (Space, Re-entry, Desert), Verniers (1 Main Body, 1 each Arm/Leg), Variable Fighter Transatmospheric Ability, Heavy Hydraulics, Semi-Monocoque

Notes: Varauta redesigned VA-14 Hunter.

Fz-109A Elgerzorene

COST: 533 CP (+113.4 CP for 2x loaded gunpod and 4x spare clip; +280.8 CP for missiles)
Availability: late 2030's



HEIGHT:
17.11m in soldier configuration
WIDTH:
19.97m in attacker configuration
LENGTH:
20.08m in attacker configuration
WEIGHT:
13,200 kg
G-Limits:
+34.1 to -20.1

Mode	MV	Land MA	Fly MA
Battroid	-0	6 (300m/round)	34 (1700m/round)
Gerwalk	-1	3 (150m/round)	51 (2550m/round)
Fighter	-2	0	68 (3400m/round)

Maneuver Pool +0%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MW	12	15	HS	5	5
Head		STR	3	4	MS	4	4
Right Arm		MS	5	6	MS	4	4
Left Arm		MS	5	6	MS	4	4
Right Leg		HS	6	7	MS	4	4
Left Leg		HS	6	7	MS	4	4
Right Wing		LW	2	3	STR	3	3
Left Wing		LW	2	3	STR	3	3

Thrusters	Location	MA
Thruster	Right Leg	17
Thruster	Left Leg	17

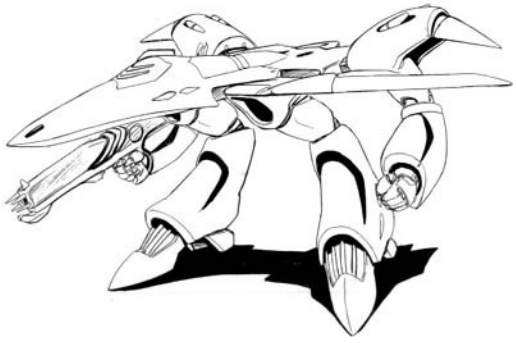
Sensors	Location	Kills	Sensors	Communications
MS Class	Head	1	7 km	1000 km
Backup	Torso	2	1 km	300 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	3K	Melee	+0	1	U	Quick, Handy

Spiritia Beam	Head	--	3	+1	1	U	Special Rules
Blaster Cannon	Torso	4K	32	+0	4	U	Rear fire in fighter
Rapid Fire Laser	Torso	2K	24	+1	2	U	BV2, All Purpose
SRM Rack	Right Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Right Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Right Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Right Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Left Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Left Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Left Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Left Arm	5K	64	+1	2	6	CMV, Crosslinked
Gunpod	1-Handed	1K	24	+1	1	-	BV3, All Purpose
Ammo						16	AP
Gunpod	1-Handed	1K	24	+1	1	-	BV3, All Purpose
Ammo						16	AP

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod, Self Destruct Hardpoints (4 on Main Body, 2 per Wing), Spiritia Absorption Beam, Spiritia Storage Cell Spiritia Defense System, Armored Canopy

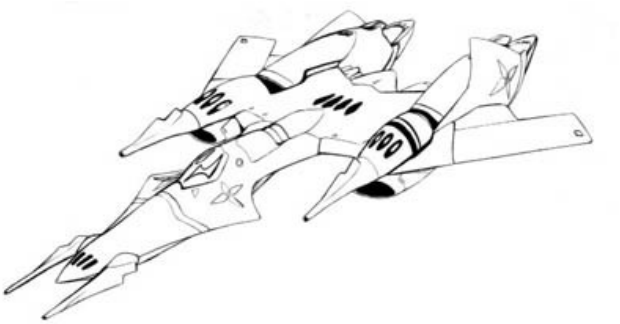
Multipliers
Environmentals (Space, Re-entry, Desert), Verniers (1 Main Body, 1 each Arm/Leg), Variable Fighter Transatmospheric Ability, Heavy Hydraulics, Semi-Monocoque



Notes: Varauta redesigned VA-14 Hunter.

Fz-109F Elgerzorene

COST: 717 CP (+113.4 CP for 2x loaded gunpod and 4x spare clip; +717.6 CP for missiles)
Availability: late 2030's



HEIGHT:
17.11m in soldier configuration
WIDTH:
19.97m in attacker configuration
LENGTH:
20.08m in attacker configuration
WEIGHT:
13,200 kg
G-Limits:
+34.1 to -20.1

Mode	**MV**	**Land MA**	**Fly MA**
Battroid	-0	6 (300m/round)	36 (1800m/round)
Gerwalk	-1	3 (150m/round)	54 (2700m/round)
Fighter	-2	0	72 (3600m/round)

Maneuver Pool +0%

Servo	**Class**	**Kills**	**Spaces**	**Armor**	**SP**	**Kills**	
Main Body		MW	12	12	HS	5	5
Head		STR	3	3	MS	4	4
Right Arm		MS	5	5	MS	4	4
Left Arm		MS	5	5	MS	4	4
Right Leg		HS	6	6	HS	5	5
Left Leg		HS	6	6	HS	5	5
Right Wing		LW	2	2	STR	3	3
Left Wing		LW	2	2	STR	3	3

Thrusters	**Location**	**MA**
Thruster	Right Leg	18
Thruster	Left Leg	18

Sensors	**Location**	**Kills**	**Sensors**	**Communications**
MS Class	Head	1	7 km	1000 km
Backup	Torso	2	1 km	300 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	3K	Melee	+0	1	U	Quick, Handy
Spiritia Beam Blaster Cannon	Head Torso	--	3	+1	1	U	Special Rules
Rapid Fire Laser	Torso	2K	24	+1	2	U	BV3, All Purpose
Pulse Laser	Head	1K	24	+1	1	U	BV2, All Purpose, Linked
Pulse Laser	Head	1K	24	+1	1	U	BV2, All Purpose, Linked
Pulse Laser	Right Arm	1K	24	+1	1	U	BV2, All Purpose, Linked
Pulse Laser	Left Arm	1K	24	+1	1	U	BV2, All Purpose, Linked
SRM Rack	Right Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Right Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Right Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Right Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Left Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Left Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Left Arm	5K	64	+1	2	6	CMV, Crosslinked
SRM Rack	Left Arm	5K	64	+1	2	6	CMV, Crosslinked
IRM Rack	Right Leg	7K	1200	+1	4	8	Crosslinked
IRM Rack	Left Leg	7K	1200	+1	4	8	Crosslinked
Gunpod	1-Handed	1K	24	+1	1	-	BV3, All Purpose
Ammo						16	AP
Gunpod	1-Handed	1K	24	+1	1	-	BV3, All Purpose
Ammo						16	AP

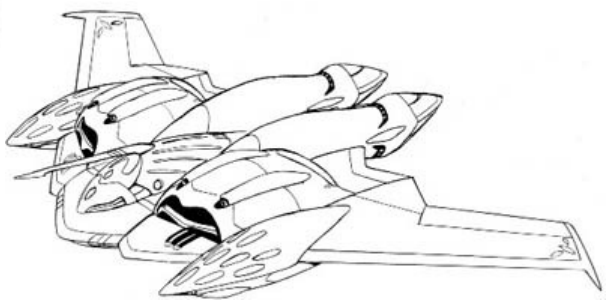
Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod, Self Destruct Hardpoints (4 on Main Body, 2 per Wing), Spiritia Absorption Beam, Spiritia Storage Cell Spiritia Defense System, Armored Canopy

Multipliers
Environmentals (Space, Re-entry, Desert), Verniers (1 Main Body, 1 each Arm/Leg), Variable Fighter Transatmospheric Ability, Heavy Hydraulics

Notes: Varauta redesigned VA-14 Hunter.

FBz-99 Zaubergeran

COST: 1690 CP (+806.1 CP for missiles)
Availability: ?



HEIGHT:
22.95m in soldier configuration
WIDTH:
37.81m in bomber configuration
LENGTH:
18.18m in bomber configuration
WEIGHT:
22,600 kg
G-Limits:
+30.0 to -20.0

Mode	**MV**	**Land MA**		**Fly MA**
Battroid		-0	7 (350m/round)	76 (3800m/round)
Gerwalk		-1	3.5 (175m/round)	114 (5700m/round)
Fighter		-2	0	152 (7600m/round)

Boosters can increase the Battroid flight speed by +4 MA (+200m/round)

Maneuver Pool +200%

Servo	**Class**	**Kills**	**Spaces**	**Armor**	**SP**	**Kills**	
Main Body		MW	12	15	MW/A	6	6
Head		STR	3	4	MS/A	4	4
Right Arm		MS	5	6	MS/A	4	4
Left Arm		MS	5	6	MS/A	4	4
Right Leg		HS	6	7	MS/A	4	4
Left Leg		HS	6	7	MS/A	4	4
Right Wing		LW	2	3	STR/A	3	3
Left Wing		LW	2	3	STR/A	3	3
Pod		STR		3	STR/A	3	3

Thrusters	**Location**	**MA**
Thruster	Right Leg	19
Thruster	Left Leg	19
Thruster	Torso	19
Thruster	Torso	19

Booster	Pod	2 (Battroid only)
Booster	Pod	2 (Battroid only)

Sensors	**Location**	**Kills**	**Sensors**	**Communications**
MS Class	Head	1	7 km	1000 km
Backup	Torso	2	1 km	300 km

Weapon	**Location**	**DMG**	**Range**	**WA**	**Kills**	**Shots**	**Notes**
Hands	Arms	3K	Melee	+0	1	U	Quick, Handy
Spiritia Beam	Head	--	3	+1	1	U	Special Rules
Pulse Laser	Right Arm	2K	24	+1	2	U	BV3, All Purpose, Linked
Pulse Laser	Left Arm	2K	24	+1	2	U	BV3, All Purpose, Linked
Beam Cannon	Right Shoulder	2K	24	+1	2	U	BV2, Phalanx Vari, Link
Beam Cannon	Right Shoulder	2K	24	+1	2	U	BV2, Phalanx Vari, Link
Beam Cannon	Left Shoulder	2K	24	+1	2	U	BV2, Phalanx Vari, Link
Beam Cannon	Left Shoulder	2K	24	+1	2	U	BV2, Phalanx Vari, Link
Rotary Missile	Torso	3K	24	+1	-	-	Volleys up to 10
Rotary Missile	Torso	3K	24	+1	-	-	Volleys up to 10
Ammo	Torso				20	100	CMV
Missile Rack	Right Shoulder	5K	64	+1	11	33	CMV, Crosslinked
Missile Rack	Left Shoulder	5K	64	+1	11	33	CMV, Crosslinked

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod, Self Destruct Hardpoints (4 on Main Body, 2 per Wing), Spiritia Absorption Beam, Spiritia Storage Cell Spiritia Defense System, Armored Canopy

Multipliers
Environmentals (Space, Re-entry, Desert), Verniers (1 Main Body, 1 each Arm/Leg), Variable Fighter Transatmospheric Ability, Heavy Hydraulics, Supercharged Engines, Semi-Monocoque

Notes: Varauta redesigned VAB-2D Wraith.

Chapter 10 – Varauta Capital Ships

The capital ships of the Varauta Empire are their own designs, unlike their mecha, even though they are built out of recycled parts and supplies from the Megaroad-13 fleet and then manufactured from the Three Star Platform taken from the Macross 5 fleet. All Varauta capital ships use the Protoculture omni-directional barrier system, modified to also function as a pinpoint barrier system.

The Varauta flagship is one of the original flagships of the previous Inspection Army, and was restored after almost 500,000 years of inactivity. Based on this information, is not unreasonable that the Varauta vessel designs match the schematics of the Inspection Army and may give some insight into the Protoculture era. In fact, it is highly probable that all of the capital ships are of original Protoculture manufacture.

Spiritia Imager

This is an added feature to all Varauta capital ships, being built into the subspace mass detector system. The system can detect all spiritia sources and their approximate strength within the sensor's range. This effectively negates all active stealth systems, as the sensor tracks the pilot's spiritia rather than the mecha's profile.

Elgerzorene

Each ship was listed with a particular compliment of Elgerzorene fighters, but did not specific between A and F models. Assume 1 in 10 (if available) are F models.

Anti-Fleet Missiles

The Varauta flagship can launch anti-fleet missiles, capable of entire fleets with a single missile. Each missile carries 24x 10 gigaton nuclear warheads. Luckily, these weapons are only found on the Varauta flagship and date back to the Schism War, so there aren't many left... we hope.

Calculating that RMS missiles inflict 250K per 50 kilotons, each warhead will inflict 50,000,000K damage. Ouch.

Each missile itself has 100K of structure with SP 50/50K gamma class (DC 80) armor and holds 24 warheads. Each individual warhead has 25K of structure with SP 20/20K gamma class armor. The range of the missile is somewhere in the neighborhood of 1 AU. The warheads have +3 WA, Blast 2000, Seek 4, Skill 20+, Range 800 from deployment, Nuclear, Long Range. The CP is irrelevant.

Mekton: 20K, +3 WA, Range (16) 5000%, Seek 4, Skill 20+, Blast 20, Nuclear, Long Range = 27,132,000 CP

Scale to Starship: 2000K, +3 WA, Range 800 (640,000), Seek 4, Skill 20+, Blast 2000, Nuclear, Long Range = 2,713,200,000 CP and that isn't even close to the damage

Varauta Fleet

The Varauta fleet consisted of approximately 500 capital ships, broken down as follows:

Flagship	x1
Super-Size Carrier	x3
Heavy Carrier	x43
Assault Cruiser	x12
High Speed Cruiser	x92
Standard Battleship	x57
Fast Frigate	x300 [?]

Varauta Capital Ships

Assault Carrier, Flagship, Heavy Battroid Transport, High Speed Cruiser, Super-Sized Carrier, Vanguard Frigate, Standard Battleship

Varauta Assault Cruiser

The Varauta Assault Cruiser is the third largest ship in the Varauta Army's Fleet after the flagship and super carrier, and although half the size of the New Macross and Uraga Class Carriers, it is still a heavily armed and armored ship quite adequately capable of defending itself against most other ships its own size and larger. Gigile made one of these vessels his flagship during the Varauta/UN Spacy conflict, striking against the Macross-7 and its Fleet. The assault carrier does have a heavy particle beam cannon.

This assault warship that's known as "Gigile's warship" is a warship that's been designed to strengthen the combined performance based on the design of the Standard Battle Line Battleship. Even though it is equipped with large beam guns and double the

energy conversion armor, the operational weight has become twice that of the battleship it's based on, and it became impossible to maintain a satisfactory speed by the initially planned enhancement of the engines used by the Standard Battle Line Battleship. Also, because the demand for output has also increased, the result is the adoption of a newly designed engine, and it became a large warship whose operational weight exceeds that of the battleship by three. Even though it is endowed with an excellent performance, because the cost is said to be ten times that of the Standard Battle Line Battleship, the production number is small.

The Assault Warship also possesses the capability to command-and-control a small-scale fleet. It is operated as the trump card of the Varauta Forces.

The armaments are mostly internal types in a warship that has a stealthy designed from a straight-lined polyhedron configuration. The lenses of large-bore guns are exposed in the center of the warship's sides. In the upper half of the warship's stern is the hangar section, and the open part in the warship's stern is an open-style gate for the hangar. The underside of the hangar section is the engine section. Carrier-borne aircraft catapult ports are laid out in the warship's bow, and there is a large-scale sensor that's referred to as the Aegis Head in the front of the upper part. Moreover, the fin structures located in the top and bottom of the back of the warship are heat sinks.

At the front of the bridge's interior is a combined window and large screen, and on the opposite side is the captain's seat. Embedded-style operator seats are lined up in the surface of the floor.

Varauta Flagship

This monstrous warship formed the heart of the Varauta Gepernich fleet that was encountered by the Macross 7 fleet in 2045. Possessing tremendous firepower even for a ship of its size, the flagship of the former Supervision army is undoubtedly one of the most powerful weapons in the galaxy. Standing in at 4,320 meters long, and carrying 500 variable fighters within its massive hangar bays, the flagship is even larger than the Zentraedi Nupetiet Vergnitzs-bis class battleship. Indeed, the flagship was designed during the Schism War, hundreds of thousands of years ago, as a weapons platform for the Supervision Army that would be able to defeat the Zentraedi flagship. De-fold signatures are significantly reduced by the ship's construction and combined with the advanced Protoculture-era fold drives, the flagship can literally de-fold right on top of an unsuspecting enemy force.

Despite the technical capabilities of the Varauta, the damage inflicted on the flagship during the Varauta/Macross 7 war was never repaired. At the end of the war, the flagship had its heavy particle beam cannon disabled, has a speaker pod gamma stuck in the bridge, and has severe damage to the left forward docking arm. This ship was never recorded as being destroyed after/during the war.

The extra-large fleet command battle carrier that was originally designed and constructed to defend the Varauta Star System's emigrants from large-scale foreign enemies, and is also about half the size of City 7. In the one ship it has the offensive ability that's comparable to a large-scale fleet. The carrier is endowed with the mobility and acceleration abilities at the level of a battleship. It also has the ability to singlehandedly exterminate a small scale Zentraedi Fleet (although one might say that the fleet has more than 1,000 ships).

The carrier is equipped with 8 Anti-Fleet Extra-Large Reaction Warhead Missiles that are each loaded with 24 10-gigaton class reaction warheads as the main munitions, and 8 heavy particle beam cannons as the main battery. In addition, the carrier is also equipped with such things as a great number of beam guns and missile phalanxes in various places. Moreover, the carrier can make use of more than 500 variable fighters. This ability usually corresponds with 2 to 3 normal scale regular space carriers.

The Fleet Flagship Space Carrier that leads the Varauta Fleet which is composed of about 500 ships. Furthermore, this warship in which the commander-in-chief Gepernich boards, may also be called "Gepernich's Warship".

The unique shape that could be called a U-letter model. A command and motive power style system is concentrated in the center of the hull's rear. Extending from the left and right of the front of the hull are giant docks in addition to ship-borne craft launch ports and hangars.

The bridge interior has had a unique design applied to it, and commander-in-chief Gepernich rode the ship here. The bridge has an excellent integrated fleet command system set up in it, and it is possible to command a fleet on the scale of several hundreds of ships in battle with it.

Varauta Heavy Battroid Transport

The Varauta heavy battroid transport is the workhorse of the carriers of the Varauta Fleet. Being more prevalent than the super sized carriers it is these 584m long vessels that carry the majority of the fighters of the Varauta Army Fleet amongst them. Strong and sturdy, these battroid transports predated the design of the super sized carriers that are based on them, on a rather larger scale though. Toughened armor plating protects the Varauta fighters inside during their transportation to the battle zone where they are launched from the standard top mounted Varauta launch bays.

The Large Battroid Transport Mother-ship has the ability to transport a maximum of on the order of 100 variable fighter craft as freight. Furthermore, it has the fighting strength of a destroyer class ship and both the fold cruising ability and speed level by which it can accompany a cruiser. While it is perfectly able to endure operations as a battleship because of those abilities, on the other hand, because much of the ship's interior space is used as a cargo compartment, it's ability to make use of carrier borne aircraft is inferior to other Varauta warships, and its overall combat ability is somewhat low. It not only transports Battroids, but can also operate as a support carrier because it also has launching catapults and fighter command and control equipment.

It is different from the other Varauta warships with its feature structure of armour planks being, above all, arranged up and down. The point where the upper part of the hull are catapults and the lower part are missile magazines is in common with the other warships of the Varauta Forces. Even though the layout with the upper half of the rear hull as a storage compartment, and the lower part is the engine section is identical to the other warships, space for the aircraft hangar section is ensured to be greater than that of the other warships. The mother-ship adopts a structure with a diamond shape cross section, that takes stealthiness into account.

Varauta High-Speed Cruiser

The vanguard frigate is used by the Varauta to scout out the edges of territory that they want to take control of. The problem with the frigate is that they are small and under-gunned and under-armed. When something bigger is required for scouting purposes and picket duty the high-speed cruiser is used. This maneuverable vessel carries 5 squadrons of the FZ-109 and AZ-130 fighters for reconnaissance and defense.

In a light space cruiser design that stresses navigational performance, the High-Speed Raiding Space Cruiser boasts of the highest speed in the Varauta Forces warships. The fold system has also been enhanced so that the attainable range in 1 fold cruise is long, and it has just enough surplus output to do a refold within a short time, too. Moreover, the armament and armour are excellent compared to the cruiser's size, and the ship is able to cope with an extensive usage as it is said to have infiltration manoeuvring for special forces things like reconnaissance in-force and intelligence missions.

Though the hull configuration is similar to that of the Standard Battle-Line Battleship, the cruiser has a smarter shape without the aperture in the bow and stern, and it has a degraded ship-borne craft operational capability. The cruiser is armed in the warship's front with the missile and carrier-based aircraft shooting mechanisms that are in-common with the Standard Battle-Line Battleship and the like. The curved configuration of the warship's structure indicates that it is an old-generation stealth warship.

One Main Battery and two Sub-Batteries per side are arranged on both the left and right sides of the hull, and the structure of each battery is the same as the other Varauta Forces warships.

Varauta Standard Battle Line Battleship

The Varauta Main Fleet Battleship is the most heavily armed warship in the Varauta Army's Fleet. Sacrificing fighter defense for weapons the Varauta Battleship is a floating arsenal of firepower capable of taking on vessels far larger than itself and inflicting heavy damage on them. This particular class of vessel is also the most widely used warship in the Varauta Fleet, and the frontline of attack in any ship-to-ship combat. At 600m long it is less than half the length of an Ark Royal Class escort carrier but more than capable of taking one on and surviving if it weren't for the formidable firepower of the Ark Royal’s fighter screen.

The Standard Battle Line Battleship is a mass-produced battleship that is operated as the capital ships of the Varauta Forces, and is characterized by the energy conversion armor that is distributed in the planks of armor that are in-common with the warships of the Varauta Fleet. The production costs are held down because of the ship's mass production, and things like it's operational performance are equivalent to that of an average level Earth warship from the same period. On the other hand, the Varauta Forces did not have a dedicated aircraft carrier, so the ability to operate a maximum on the order of 40 variable fighters was bestowed to this battleship. When 2 to 3 of these battleships operate together, they exhibit a carrier-borne aircraft deployment capability that is proportionate to a regular carrier.

From things like the hull heat sink and bow carrier-borne aircraft launch ports, it looks like the battleship has inherited it's design from an assault warship. The bow

carrier-borne aircraft launch port has proven to be for large craft. Moreover, the first half of the hull is covered with armor composed of planks. The upper open part of the warship's stern is a hanger gate that has an emergency shutter, and the lower one is the propulsion nozzle of the engine compartment. The battleship was used in extensive situations, from operations as the battle strength that composes a large-scale fleet to feint missions as a single warship.

Varauta Super-Sized Carrier

The Varauta Super Sized Carrier is the largest ship in the Varauta's fleet aside from the Varauta flagship. The carrier is only slightly smaller than the New Macross and Uraga Class carriers with only a slightly smaller force of variable fighters. The dorsal and ventral panels unfold to become flight decks for the carrier's fighters launching 3 at a time, with a possible 42 being launched at any one time.

The new model space carrier that the Varauta Forces put into battle during the war's final phase. Even though each warship in the Varauta Forces is loaded with Variable Fighters, the Varauta Forces finally accepted the necessity of a dedicated carrier, and built this ship in haste.

It is a large warship that exceeds 1,000 m. This same warship is equipped with a great number of armaments, such as large-bore beam guns, close-range missiles, and reaction missile launchers. Though it is a carrier, it is endowed with the fire power of a heavy cruiser class. Furthermore, even though it operated equipped with about 200 Variable Fighters, the New Gigantic Carrier takes only about 20 minutes until it's deployed all 200 craft that are loaded within it; as it is equipped with 4 opening-and-shutting style scramble catapults per side that can discharge a maximum of 24 Variable Fighters at the same time.

The lower half of the stern is the engine section, and the upper part is the hangar section. In addition to the bridge, the main armaments, such as the Reaction Missile Launchers and Large-Bore Beam Guns, are concentrated on the warship's front. In the warship's center to stern are the Scramble Catapult Decks. Each catapult deck can launch 3 Variable Fighters at the same time. Because of these catapults, the New Gigantic Carrier demonstrates a carrier-borne aircraft deployment ability that the other warships on the Varauta Fleet do not have.

Varauta Vanguard Frigate

The Varauta vanguard frigate is small and swift, used by the Varauta for reconnaissance and small raids. Although it has no stealth capabilities like its UN Spacy opposite, its small size and angular design makes detecting it at distance difficult. These scout frigates are used to search out new sources of spiritia for their Protodeviln masters, reporting back to them on any exceptionally high spiritia readings they may have discovered with their advanced sensor/spiritia detection suites. The vanguard frigate only carries a total of four FZ-109 Elgerzorene for reconnaissance purposes.

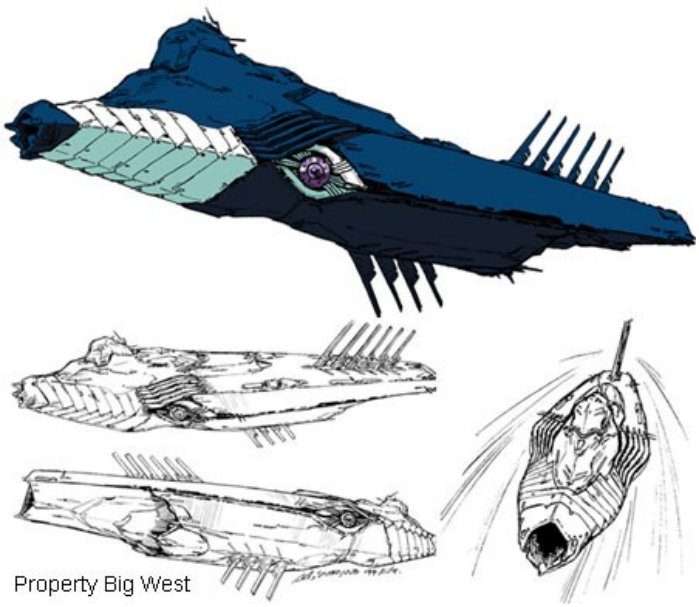
The multi-purpose light destroyer of the Varauta Forces. It is assumed that 294 were operated, and they are the most abundantly produced warship by these forces. As this size of warship, it excels in the balance of mobility with armaments and armor. In addition, it's versatility is also high because the frigate can be equipped with 2 (a maximum of 3) variable fighters; and it possesses the ability to accomplish various

missions. The Vanguard Frigate showed a high operability, and it was put into every service, from fleet-scale operations to small-scale reconnaissance, enemy searches, escort, and intelligence actions. Though it is a small warship, it has an excellent firepower in its abundant armaments, and it also played an active role in large-scale fleet battles such as the battle on orbit of the Planet Rex.

The same as the other warships in the Varauta fleet, the upper half of the rear of the hull is an aircraft hanger, and the lower half is the engine section. The lower part of the center of the hull is armed with Large Anti-Warship Missile launching mechanism.

Varauta Assault Cruiser

COST: 1,875,898 CP
Manufacturer: Varauta Army



HEIGHT: ?
WIDTH: ?
LENGTH: 862m
WEIGHT: 60,000,000 tons
CREW: 640 total (30 officers, 400 crew, 60 VF pilots, 150 soldiers)

Hull Class: MegaHeavy+
KILLS: 2770
ARMOR: SP 110
SPACES: 78

MA: 34 (Mach 3)
Turn: +11
Crew Grade: C (12+1d10)

System	Kills	Range
LH Communications	200	18,000 km
AH Sensors	300	3,000 km

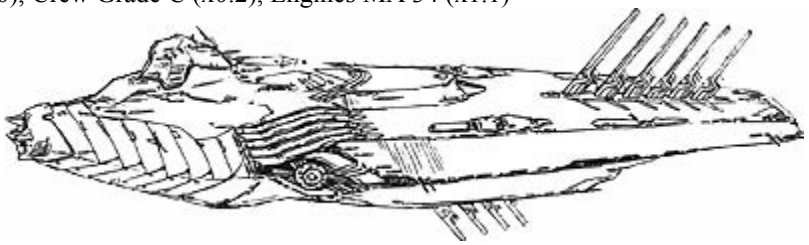
Weapon	Arc	DMG	Range	WA	Kills	Payload
Heavy Particle Cannon	FF	5000K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 5						
Superheavy Laser (2)	S	500K	6,437,376	+1	500	U
Warm Up 1						
Light Laser (48)	All	50K	123,597	+1	50	U
Strike Missiles (6)	F	700K	6,437,376	+1	90	6
Each missile takes 25K to destroy. Blast 15, Warm up 2						
Missile Launchers (26)	All	7K	12,000	+1	50	36
Fires volleys of up to 6 per launcher						

Mecha/Shuttle Compliment
FZ-109A Elgerzorene 42
AZ-130 Pantzerzorene 16

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (1500 for 20 years)
Anti-Gravity System, Omni-directional Barrier, Pinpoint Barrier System (medium)
Spiritia Detector

Bays
Mecha: 1 bay (120 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 1 bay (6050 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

Multipliers
Space Fold (x1.0), Crew Grade C (x0.2), Engines MA 34 (x1.1)

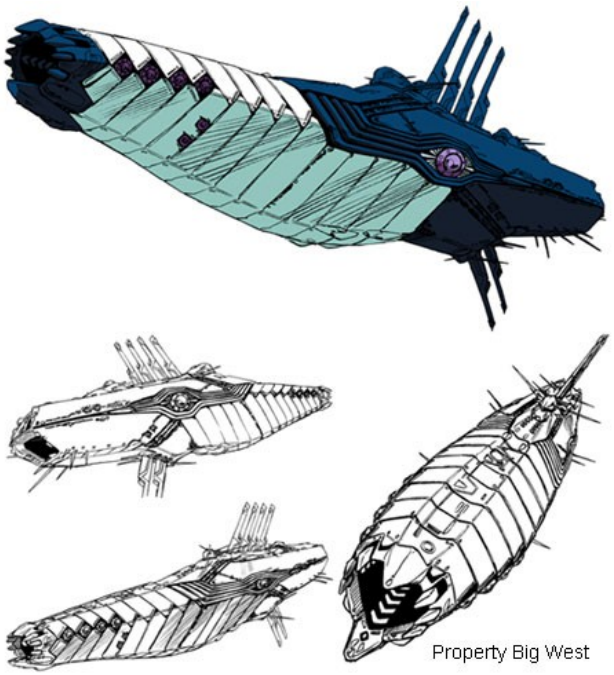


Programme: This ship is constructed for use as an assault ship and a flagship for small- to medium-scale fleets. Open-style hanger gate in aft, battroid launch port in forward.

Notes: The official stats list this ship as 600,000 tons, which does not give it a sufficient hull class to make room for all of the appropriate systems and crew. For those wishing to keep all stats more accurate, assume the Varauta have sufficient advanced technology to build a ship of the same size that is far lighter for no additional costs (they do have unaltered Protoculture technology after all).

Varauta Standard Battle Line Battleship

COST: 1,391,296 CP
Manufacturer: Varauta Army



HEIGHT: ?
WIDTH: ?
LENGTH: 600m
WEIGHT: 18,800,000 tons [180,000 tons operational; 150,000 tons empty]
CREW: 985 total (55 officers, 700 crew, 80 VF pilots, 150 soldiers)

Hull Class: MegaHeavy+
KILLS: 2350
ARMOR: SP 110
SPACES: 37

MA: 34 (Mach 3)
Turn: +11
Crew Grade: C (12+1d10)

System	**Kills**	**Range**
LH Communications	200	18,000 km
AH Sensors	300	3,000 km

Weapon	**Arc**	**DMG**	**Range**	**WA**	**Kills**	**Payload**
Superheavy Laser (2)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Heavy Laser (8)	F	200K	6,437,376	+1	200	U
Medium Laser (12)	All	100K	250,000	+1	100	U
Light Laser (20)	All	50K	123,597	+1	50	U
Missile Launcher (14)	All	7K	12,000	+1	50	36
Fires volleys of up to 6 per launcher						
Strike Missiles (4)	F	700K	6,437,376	+1	90	12
Each missile takes 25K to destroy. Blast 15, Warm up 2						
Torpedo Tube (8)	F	50K	123,597	+1	50	U
Each torpedo takes 8K to destroy. Blast 5.						

Superheavy Laser (2)

Heavy Laser (8)
Light Laser (12)
Strike Missile (9) 9
LRM (1)
Payload 144; may fire in volleys of up to 12
CIDS A 5K

Mecha/Shuttle Compliment
FZ-109A Elgerzorene 40

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (1500 for 2 years)
Anti-Gravity System, Omni-directional Barrier, Pinpoint Barrier System (medium)
Spiritia Detector

Bays
Mecha: 1 bay (120 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 1 bay (6050 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

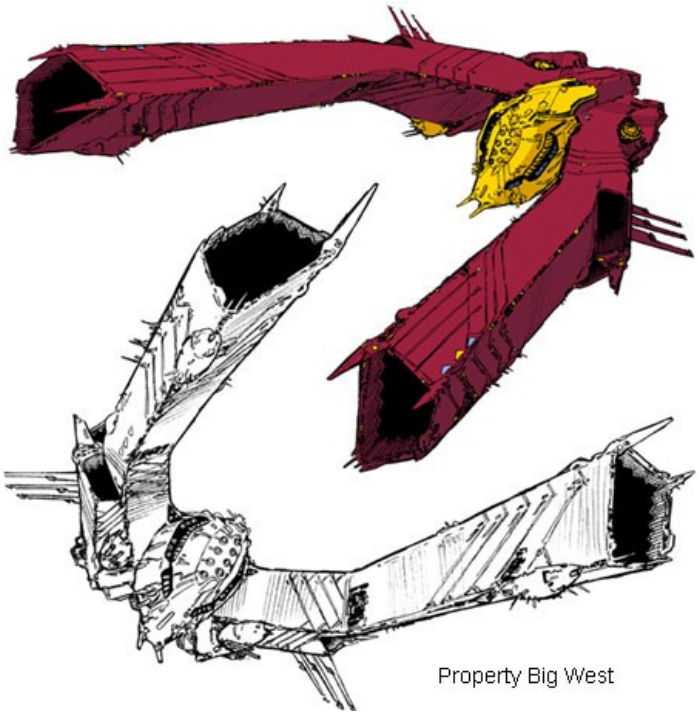
Multipliers
Space Fold (x1.0), Crew Grade C (x0.2), Engines MA 34 (x1.1)

Programme: This ship is the main capital warship of the Varauta forces. It is distinguished by heavy weaponry and armor, and can stow many variable fighters. It is equipped with catapults, each capable of launching four of the stowed fighters on its upper deck.

Notes: The official stats list this ship as 180,000 tons, which does not give it a sufficient hull class to make room for all of the appropriate systems and crew. For those wishing to keep all stats more accurate, assume the Varauta have sufficient advanced technology to build a ship of the same size that is far lighter for no additional costs (they do have unaltered Protoculture technology after all).

Varauta Fleet Flagship

COST: 10,782,959 CP
Manufacturer: Varauta Army



HEIGHT: ?
WIDTH: ?
LENGTH: 4230m
WEIGHT: 320,000,000 tons operational; 210,000,000 empty
CREW: 5620 total

Hull Class: MegaHeavy+
KILLS: 5370
ARMOR: SP 110
SPACES: 339

MA: 34 (Mach 3)
Turn: +11
Crew Grade: A (16+1d10)

System	Kills	Range
LH Communications	200	18,000 km
AH Sensors	300	3,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Main Particle Cannon (2)	FF	5000K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 5						
Bombardment Cannon (2)	LF	5000K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 5						
Superheavy Laser (4)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Superheavy Laser (2)	LF	500K	6,437,376	+1	500	U
Warm Up 1						
Medium Laser (150)	All	100K	250,000	+1	100	U
Light Laser (110)	All	50K	123,597	+1	50	U
Torpedo Tube (8)	F	700K	6,437,376	+1	90	U

Each missile takes 25K to destroy. Blast 15, Warm up 2

Main Particle Cannon (8)	A
Superheavy Laser (2)	A
Heavy Laser (8)	A
Medium Laser (12)	A
Strike Missile (1)	A
Payload 144; may fire up to 12 at a time	
Anti-Fleet Missile (8)	A

Mecha/Shuttle Compliment

FZ-109A Elgerzorene	360
AZ-130 Pantzerzorene	120
FBZ-99 Zaubergeran	12

* The flagship docks 20 to 30 vanguard frigates (plus their mecha compliments) for close defense, and can accommodate 6 to 8 larger warships in the forward docking arms.

Optional Systems

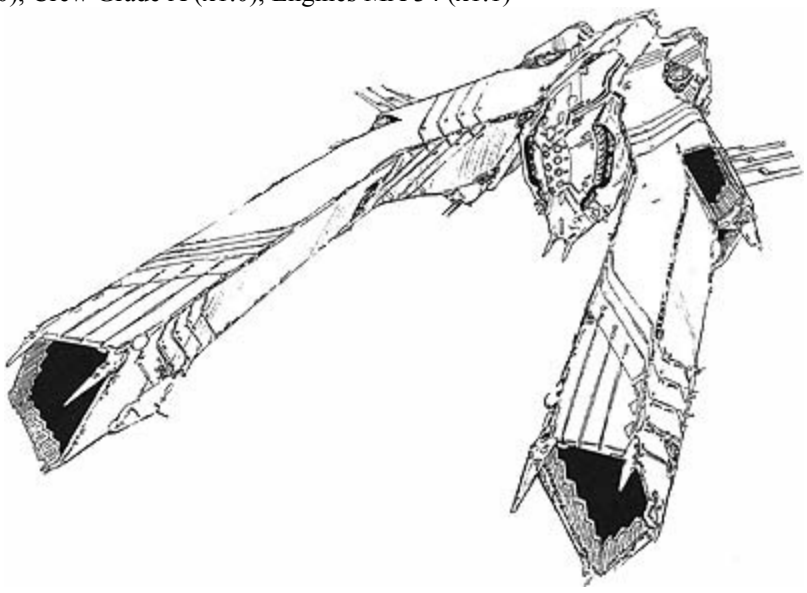
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (thousands for 30 years)
Anti-Gravity System, Omni-directional Barrier, Pinpoint Barrier System (heavy)
Spiritia Detector

Bays

Mecha: 5 bays (600 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 10 bays (60,500 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 5 bays (600 capacity)

Multipliers

Space Fold (x1.0), Crew Grade A (x1.0), Engines MA 34 (x1.1)



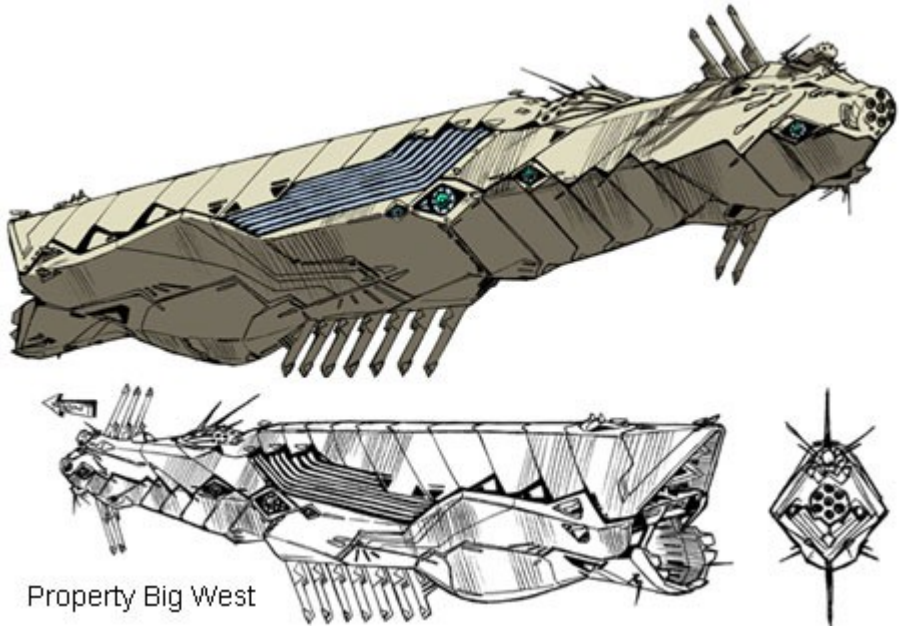
Programme: This ship operates as a super-size mobile fortress and the Gepernich fleet flagship Giant docks capable of accommodating numerous large warships simultaneously, ship-borne craft hangers, and linear catapults for launching ship-borne craft in the port and starboard halves of the ship.

Notes: Due to his close proximity, Gepernich can allow the crew of the flagship greater access to their remembered training without risk of losing control over them. By the end of the Varauta/Macross 7 war,

the bombardment particle cannons and the left docking arm are destroyed, and there is a speaker pod gamma still stuck in the command center.

Varauta Heavy Battroid Carrier

COST: 915,296 CP
Manufacturer: Varauta Army



HEIGHT: ?
WIDTH: ?
LENGTH: 684m
WEIGHT: 19,755,000 tons [195,000 tons operational, 125,000 tons empty]
CREW: 1230 total (50 officers, 800 crew, 100 VF pilots, 280 soldiers)

Hull Class: MegaHeavy+
KILLS: 2360
ARMOR: SP 110
SPACES: 38

MA: 34 (Mach 3)
Turn: +11
Crew Grade: C (12+1d10)

System	Kills	Range
LH Communications	200	18,000 km
AH Sensors	300	3,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (2)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Medium Laser (4)	F	100K	250,000	+1	100	U
Light Laser (20)	All	50K	123,597	+1	50	U
Strike Missiles (6)	F	700K	6,437,376	+1	90	30 total
Each missile takes 25K to destroy. Blast 15, Warm up 2						
Missile Launchers (20)	All	7K	12,000	+1	50	36

Fires volleys of up to 6 per launcher
Superheavy Laser (2)
Medium Laser (4)
Light Laser (2)
Rapid Fire Laser (7)
Strike Missile (4) 9
LRM (1)
Payload 144; may fire in volleys up to 12

Mecha/Shuttle Compliment
FZ-109 Elgerzorene 96
AZ-130 Pantzerzorene 4
*Only 3 to 5 of the carried mecha are used for ship defense.

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (1250 for 2 years)
Anti-Gravity System, Omni-directional Barrier, Pinpoint Barrier System (medium)
Spiritia Detector

Bays
Mecha: 1 bay (120 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 1 bay (6050 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

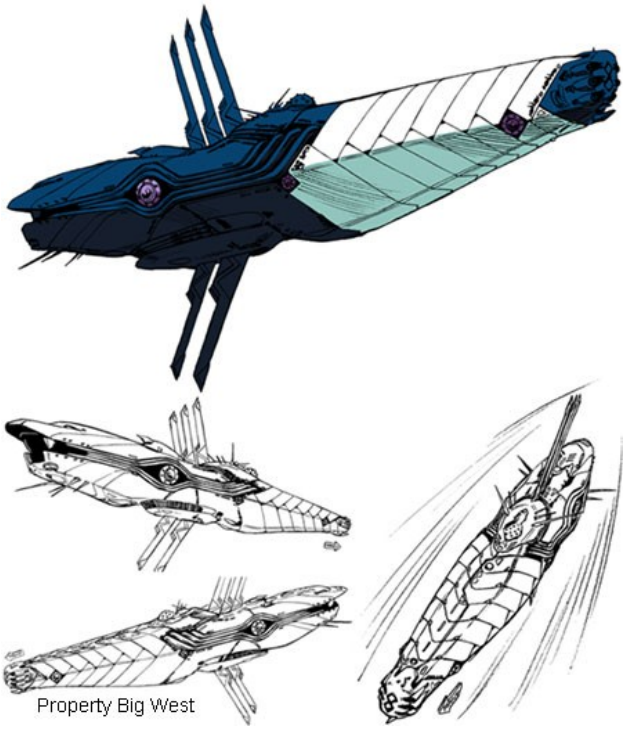
Multipliers
Space Fold (x1.0), Crew Grade C (x0.2), Engines MA 34 (x1.1)

Programme: This ship is constructed for use as an assault ship and a flagship for small- to medium-scale fleets. Open-style hanger gate in aft, battroid launch port in forward.

Notes: The official stats list this ship as 195,000 tons, which does not give it a sufficient hull class to make room for all of the appropriate systems and crew. For those wishing to keep all stats more accurate, assume the Varauta have sufficient advanced technology to build a ship of the same size that is far lighter for no additional costs (they do have unaltered Protoculture technology after all).

Varauta High-Speed Raiding Cruiser

COST: 797,331 CP
Manufacturer: Varauta Army



HEIGHT: ?
WIDTH: ?
LENGTH: 366m
WEIGHT: 2,912,500 tons [32,500 tons operational; 28,000 tons empty]
CREW: 640 total (30 officers, 400 crew, 60 VF pilots, 150 soldiers)

Hull Class: MegHeavy
KILLS: 2200
ARMOR: SP 100
SPACES: 22

MA: 34 (Mach 3)
Turn: +11
Crew Grade: C (12+1d10)

System	**Kills**	**Range**
LH Communications	200	18,000 km
AH Sensors	300	3,000 km

Weapon	**Arc**	**DMG**	**Range**	**WA**	**Kills**	**Payload**
Superheavy Laser (2)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Medium Laser (4)	F	100K	250,000	+1	100	U
Light Laser (12)	All	50K	123,597	+1	50	U
Strike Missiles (6)	F	700K	6,437,376	+1	90	30 total
Each missile takes 25K to destroy. Blast 15, Warm up 2						
Missile Launchers (10)	All	7K	12,000	+1	50	36
Fires volleys of up to 6 per launcher						

Superheavy Laser (2)
Heavy Laser (2)

Light Laser (2)
Rapid Fire Laser (6)
Strike Missile (2) 9
LRM (1)
Payload 144; may fire in volleys up to 12

Mecha/Shuttle Compliment
FZ-109A Elgerzorene 12
AZ-130 Pantzerzorene up to 4

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (800 for 20 years)
Anti-Gravity System, Omni-directional Barrier, Pinpoint Barrier System (light)
Spiritia Detector

Bays
Mecha: 1 bay (120 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 1 bay (6050 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

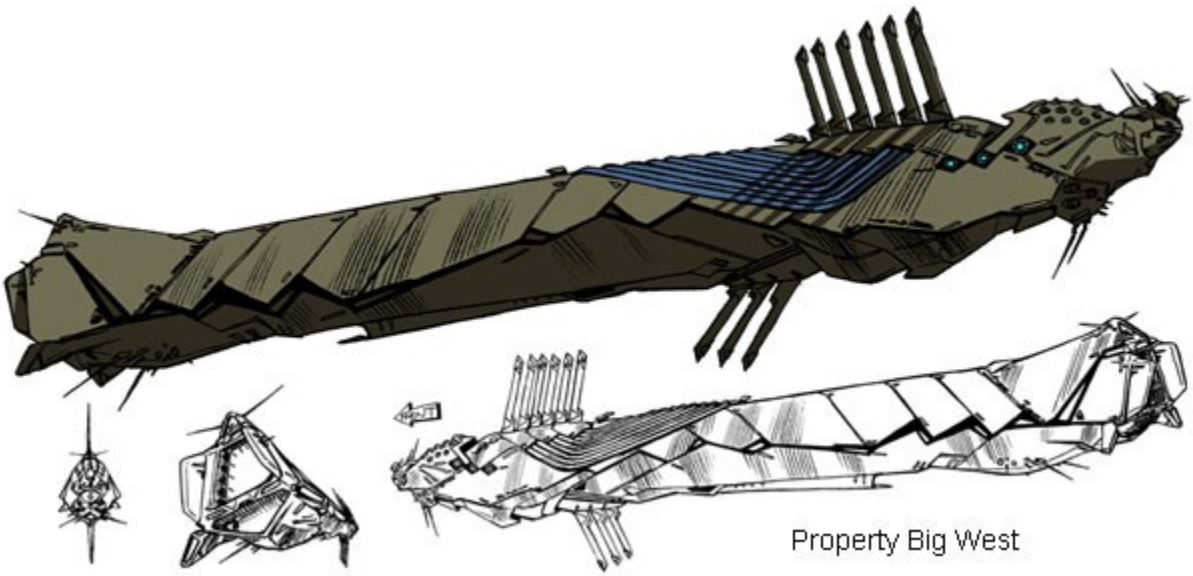
Multipliers
Space Fold (x1.0), Crew Grade C (x0.2), Engines MA 34 (x1.1)

Programme: This ship features upgraded conventional engine thrust, higher fold engine power, improved maneuverability, increased armor in the fore, and greater firepower in the fore for raids, disturbances, and armed assault missions.

Notes: The official stats list this ship as 32,500 tons, which does not give it a sufficient hull class to make room for all of the appropriate systems and crew. For those wishing to keep all stats more accurate, assume the Varauta have sufficient advanced technology to build a ship of the same size that is far lighter for no additional costs (they do have unaltered Protoculture technology after all).

Varauta Super-Sized Carrier

COST: 768,345 CP
Manufacturer: Varauta Army



HEIGHT: ?
WIDTH: ?
LENGTH: 1400m [1359m]
WEIGHT: 92,500,000 tons [2,500,000 tons]
CREW: 2090 total (70 officers, 1200 crew, 320 VF pilots, 500 soldiers)

Hull Class: MegaHeavy+
KILLS: 3090
ARMOR: SP 110
SPACES: 111

MA: 34 (Mach 3)
Turn: +11
Crew Grade: C (12+1d10)

System	Kills	Range
LH Communications	200	18,000 km
AH Sensors	300	3,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (6)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Light Laser (6)	All	50K	123,597	+1	50	U
Missile Launcher (26)	All	7K	12,000	+1	50	36
Fires volleys of up to 6 per launcher						
Superheavy Laser (2)						
Heavy Laser (4)						
Rapid Fire Laser (6)						
Strike Missile (1)	A					9
LRM (2)						
Payload 144; may fire in volleys up to 12						
CIDS	A	5K				

Mecha/Shuttle Compliment
FZ-109A Elgerzorene 216
AZ-130 Pantzerzorene 24

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (2000 for 2 years)
Anti-Gravity System, Omni-directional Barrier, Pinpoint Barrier System (medium)
Spiritia Detector

Bays
Mecha: 2 bays (240 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: 1 bay (6050 ton capacity)
Medical Bay: 1 bay (12,100 capacity)
Repair Bay: 1 bay (120 capacity)

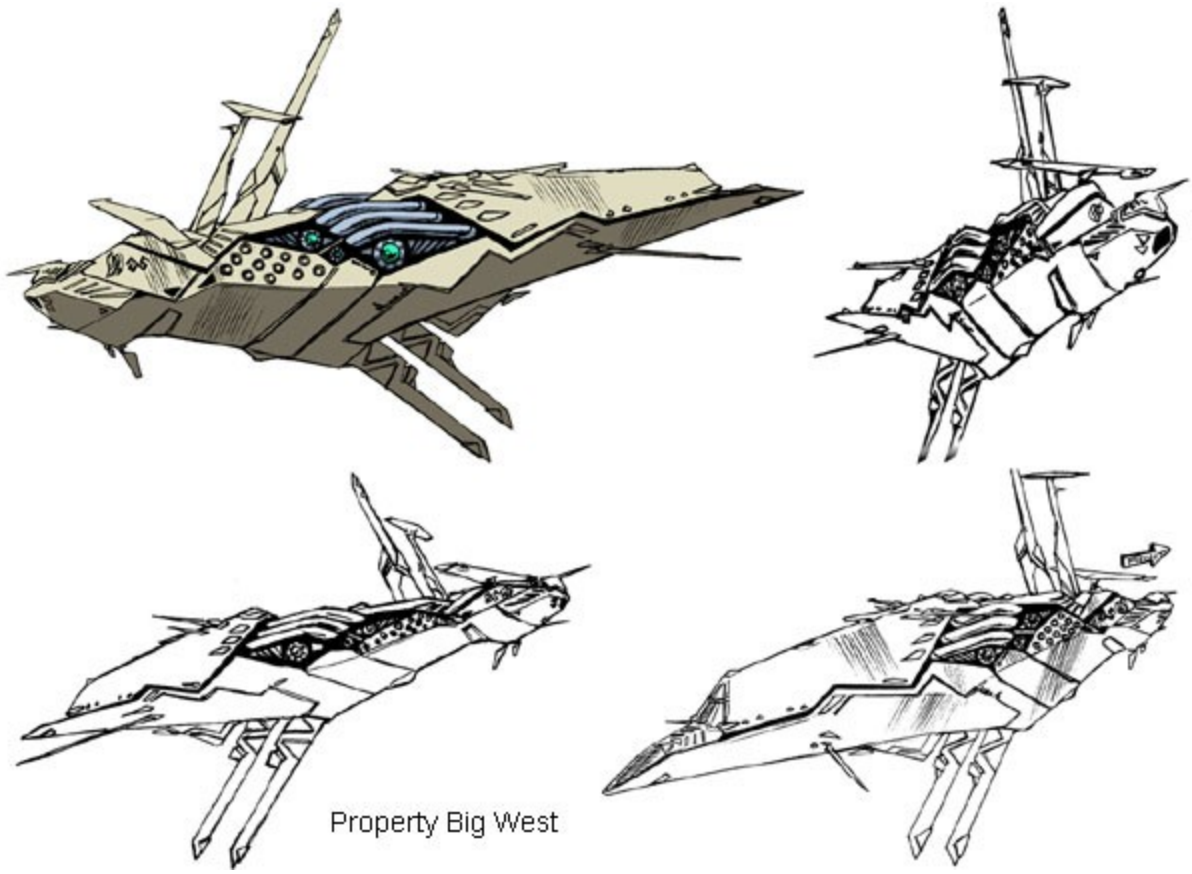
Multipliers
Space Fold (x1.0), Crew Grade C (x0.2), Engines MA 34 (x1.1)

Programme: This ship is the most mass-produced standard small warship in the Varauta forces. Its reliability is due to its balance of maneuverability, armor, and weaponry. Since it is thought to be a new design capable of missions for small vessels, it is assigned to vanguard, enemy detection, armed reconnaissance, defense, and various other missions.

Notes: The only stats I have found list this ship as 925,000,000 tons, which makes it heavier than the fleet flagship.

Varauta Vanguard Frigate

COST: 509,715 CP
Manufacturer: Varauta Army



HEIGHT: ?
WIDTH: ?
LENGTH: 168m
WEIGHT: 250,000 tons [1500 tons operational; 1020 tons empty]
CREW: 615 total (30 officers, 400 crew, 35 VF pilots, 150 soldiers)

Hull Class: Medium Weight
KILLS: 1200
ARMOR: SP 80
SPACES: 12

MA: 34 (Mach 3)
Turn: +6
Crew Grade: C (12+1d10)

System	Kills	Range
LH Communications	200	18,000 km
AH Sensors	300	3,000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (2)	F	500K	6,437,376	+1	500	U
Warm Up 1						
Medium Laser (4)	F	100K	250,000	+1	100	U
Missile Turret (2)	All	17K	1200	+1	50	12
Fires volleys of up to 6 per launcher						

Heavy Laser (2)
Light Laser (4)
Strike Missile (1) 9
LRM (2)
Payload: 144; may fire in volleys up to 12
CIDS A 5K

Mecha/Shuttle Compliment
FZ-109A Elgerzorene 2

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (400 for 2 years)
Anti-Gravity System, Omni-directional Barrier, Pinpoint Barrier System (light)
Spiritia Detector

Bays
Mecha: 1 bay (120 capacity)
Crew: 1 bay (12,100 capacity)
Cargo: none
Medical Bay: none
Repair Bay: none

Multipliers
Space Fold (x1.0), Crew Grade C (x0.2), Engines MA 34 (x1.1), Active Stealth (x1.3)

Active Stealth: This system has pulse refraction, beam refraction, magnetic refraction, fire control, and combat cloak in addition to active stealth.

Programme: This ship is the most mass-produced standard small warship in the Varauta forces. Its reliability is due to its balance of maneuverability, armor, and weaponry. Since it is thought to be a new design capable of missions for small vessels, it is assigned to vanguard, enemy detection, armed reconnaissance, defense, and various other missions.

Notes: The official stats list this ship as 1,500 tons, which does not give it a sufficient hull class to make room for all of the appropriate systems and crew. For those wishing to keep all stats more accurate, assume the Varauta have sufficient advanced technology to build a ship of the same size that is far lighter for no additional costs (they do have unaltered Protoculture technology after all).

Chapter 11 – Anti-UN Mecha & Ships

In 2008, the first Anti-UN mecha was the SV-51, based on stolen plans for the VF-0 Phoenix. The SV-51 was more maneuverable and had more firepower than the VF-0 since it was designed for combat from the beginning whereas the VF-0 was more of a "will this work" experiment. Also from this time period is the Octos, a variable submersible mecha.

As time progresses, the Anti-UN forces seem to get stronger. In 2039-2040, there was an increase of Anti-UN Zentraedi activity using what was labeled "rogue power armor" – a variant of the Zentraedi Nousjadeul-Ger power armor of modern manufacture (Nousjadeul-Ger Kai). The Anti-UN forces have a secret facility for the manufacturing of their mecha. They also have another mecha called the Gjagravan-Va, a quadruped style mecha.

For capital ships, they have one modified from the Zentraedi Quel-Quallie Reconnaissance Pod called the Annabella Lasiodora. Recently, the Anti-UN has revealed

their power with a destroyer called the Untamed; which seems to be adapted from the Northampton Stealth Frigate. This has the UN concerned. There is also the Vandal, a semi-transformable gunship armed with the highly powerful particle beam cannon.

Quite often, anti-UN forces use hijacked or black market UN mecha. One such group hijacked the Macross itself.

SV Wing Mount External Fuel Tank
VF Used: VF-0
CP: 20 per pair
B-Mod: 1.0

These are a pair of external fuel tanks that attach to the wings of the SV-51 to increase its range. The SV's computer will automatically eject the tanks if one of them is breached. Each tank has LW armor (2K SP 2) and provides a total of 1000 km of fuel together. The pods also contain 9 micro-missiles each (+1 WA, Range 32, Damage 3K, 2K).

GSH-371 55mm Gunpod
VF Used: SV-51 & SV-52

This gunpod is based on the GU-9 used by the VF-0 (also stolen from the UN), however it has less ammunition due to it being smaller in design. It uses clips of ammunition.
Gunpod: +1 WA, Range 24, Damage 1K, 1K, BV 3, CP 42.9
Ammo: AP, Payload 30, CP 12.87 per clip

GSH-231 12.7mm Machinegun

Similar to the 12.7mm used by UN forces, it also uses pre-OT depleted uranium ammunition.
VF Used: SV-51 & SV-52
WA +0, Range 600m, 6d10 Hits, BV4, Ammo 100, 30 Hits, Weight 300 kg, CP 9

<u>Anti-Unity Government Units</u>
Conventional: MiG-29 Fulcrum, A-15 Executioner
Mecha: SV-51, SV-52, Gjagravan-Va, Octos, Nousjadeul-Ger Kai
Capital Ships: Annabella Lasiodora, Untamed, Vandal

Gjagravan-Va

The Gjagravan-Va is a heavy quadruped-style mecha with several heavy weapons and plenty of armor.

SV-51 & SV-52

The SV-51 (SV meaning Sukhoi Valkyrie) was built before Space War I from the stolen plans of the VF-0 Phoenix. The SV-51 was built primarily for combat, and thus it is heavier from additional weapons and armor than the VF-0. Additionally, the SV-51 has VTOL capability without needing to switch to gerwalk formation. The SV-52 is a variant built to be launched from submarines and has improved underwater capability and folding wing design for storage.

Variants include the SV-51α single seat (32 made), SV-51 two seat (6 made), SV-51γ special-tuned version for ace pilots (2 made) and the SV-52 (12 converted from SV-51α.

Untamed

The *Untamed* Class Destroyer is one of the latest addition to the Anti-UN, and a variety of Terrorist organizations. The Untamed Destroyer has a staggering array of weapons, ranging from anti-mecha to anti-warship weapons. Despite its small size it can in some cases outgun ships much larger than itself. One of the most interesting things about the untamed class ship is how much it closely resembles the Sentinel Class Stealth Carrier. The Untamed shares a near basic shape with the Sentinel, despite the Untamed being slightly larger. Both also share a transformation sequence, although different, and both are stealth vessels. UN Intelligence believe that someone has taken the plans for the Sentinel and modified it to create a powerful Destroyer from it. As to who has done this no one knows. It is believed that the Critical Path Corporation maybe responsible but no evidence can be found.

Only a handful of this class of vessel have been seen so far, however it shows a definite change in tactics by the Anti-UN and terrorist groups. They are now developing specialist ships for attacking the UN Armed Forces with, and growing bolder as a result. It is also evident from the Untamed Class Destroyer that the Anti-UN know have their hands on stealth technology. The UN are conducting investigations into the implications of this.

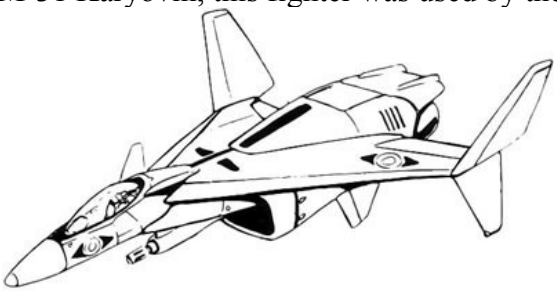
Vandal

Variable Attack craft used by the Black Rainbow Terrorist Group and other Anti-Unification Groups to engage in combat the UN Spacy, in uprising against the UN government. It is unknown where the Vandal Class is manufactured, and who it is manufactured by, although it is rumored and believed to have been created and manufactured by the Anti-UN. The class of ship however, is being used by the Anti-UN and sold to a variety of terrorist groups opposed to the UN Government. UN Intelligence is actively working to locate the suppliers of this vessel to cease the flow of ships. This is being done in conjunction with their attempts to locate the manufacturing site as of the Anti-UN armor.

Anti-UN Profiles

A-15 Executioner

Also named MiM-31 Karyovin, this fighter was used by the Anti-UN forces.



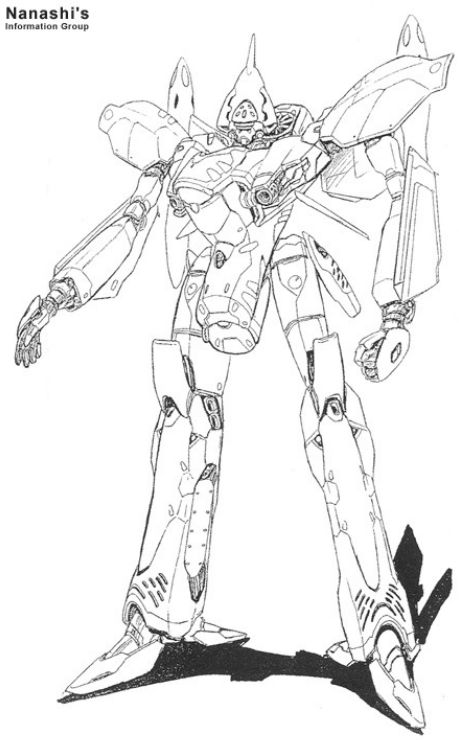
Length: 8.2m

Weight: 10,800 kg
Speed: Mach 2.2 at 15 km altitude and Mach 1.1 at sea level, 3218 km fuel range
Crew: one
Weapons:
Autocannon: +0 WA, 2K, Range 24, BV3, 1Kill, Clip 180
Two hardpoints under each wing (up to 8 IRM)
Four hardpoints on the fuselage (up to 8 IRM)
Cost: 2,500,000 credits

MiG-29 Fulcrum

Multi-role fighter used by the Anti-UN forces during WWIII and before Space War I.

Length: 17.32m
Height: 4.73m
Wingspan: 11.32m
Weight: 15.32 tons
Speed: 2,445 kmph
Weapons:
GSh-30-1: +0 WA, Range 600m, 6d10 Hits, BV4, Ammo 100, 30 Hits,
Two hardpoints per wing
Two hardpoints on fuselage
Manufacturer: Mikoyan-Gurevich Design Bureau
Cost:



SV-51α

COST: 241 CP (+60.1 for loaded gunpod and 1x spare clip)
Availability: 2008

HEIGHT:
47.0 ft (14.10 m) in soldier configuration.
WIDTH:
?
LENGTH:
22.77m in fighter configuration
WEIGHT:
Empty: 17,800 kg
Standard T-O Weight: ?
Max T-O Weight: ?
Service Ceiling:

22,500m

Mode	MV	Land MA	Fly MA
Battroid	-1	6 (300m/round)	17 (850m/round)
Gerwalk	-2	3 (150m/round)	25.5 (1275m/round)
Fighter	-3	0	34 (1800m/round)

Maneuver Pool +0%

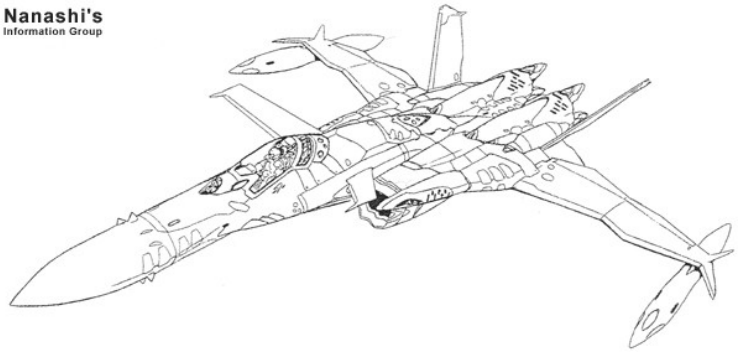
Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		MS	8	10	STR	3	3
Head		LW	2	2	LW	2	2
Right Arm		STR	4	4	LW	2	2
Left Arm		STR	4	4	LW	2	2
Right Leg		STR	4	4	STR	3	3
Left Leg		STR	4	4	STR	3	3
Right Wing		LW	2	2	LW	2	2
Left Wing		LW	2	2	LW	2	2

Thrusters	Location	MA
Thruster	Right Leg	8
Thruster	Left Leg	8

Sensors	Location	Kills	Sensors	Communications
STR Class	Head	1	4 km	800 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	1K	Melee	+0	1	U	Quick, Handy
GU-11 Gunpod	1 Handed	1K	24	+1	1	U	All-Purpose, BV 3
Ammo						60	Armor Piercing
ROV-20 Laser	Head	1K	12	+1	1	U	Phalanx Variable
ROV-20 Laser	Head	1K	12	+1	1	U	Phalanx Variable

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight (x2), Storage Module, Escape Pod
Weapon Mount, Self Destruct, Combat Computer, Resolution Enhance (4x)
Hardpoints (1 on Main Body, 2 per Leg), +1000km of fuel, Flare/Chaff Dispenser (12 in each leg)



Multipliers
Environmentals (Arctic, Desert), Verniers (1 Main Body, 2 each Leg), Semi-monocoque
Variable Fighter, Autopilot, Active Stealth (-3 to detect rolls)

Notes
The engines use liquid fuel, limiting the effective range of the fighter to close combat near a refueling source.

Standard model with approximately 32 units built (12 later converted into SV-52).

SV-51

COST: 245 CP (+60.1 for loaded gunpod and 1x spare clip)
Availability: 2008
Notes: Dual seat version (6 built)

SV-51γ

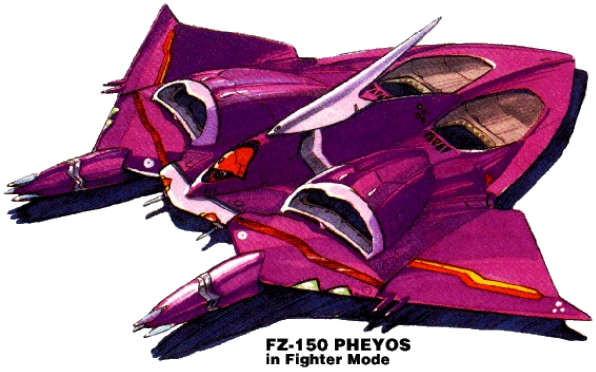
COST: 258 CP (+60.1 for loaded gunpod and 1x spare clip)
Availability: 2008
Notes: Special tuned version for ace pilots (2 built)
Add ACE +33%
Add second Gsh-331 12.7mm machinegun

SV-52

COST: 254 CP (+60.1 for loaded gunpod and 1x spare clip)
Availability: 2008
Notes: Add Underwater and High Pressure (300m) Enviromentals

FZ-150 Pheyos

COST: 1103 CP (+631.8 CP for missiles)
Availability: late 2030's



HEIGHT:
23.4m in soldier configuration.
4.21 m in fighter configuration
WIDTH:
14.83 m full expansion of wings
LENGTH:
16.25 m in fighter configuration
WEIGHT:
13,560 kg
G-Limits:
+65.0 to -48.0

Mode	MV	Land MA	Fly MA
Battroid	+1	8 (400m/round)	47 (2350m/round)
Gerwalk	-0	4 (200m/round)	70.5 (3525m/round)
Fighter	-1	0	94 (4700m/round)

Maneuver Pool +167%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body		HS	10	13	MW/A	7	7
Head		STR	3	4	MS/A	4	4
Right Arm		MS	5	6	MS/A	4	4
Left Arm		MS	5	6	MS/A	4	4
Right Leg		HS	6	7	HS/A	5	5
Left Leg		HS	6	7	HS/A	5	5
Right Wing		STR	3	4	MS/A	4	4
Left Wing		STR	3	4	MS/A	4	4
Right Pod		STR		6	STR/A	3	3
Left Pod		STR		6	STR/A	3	3

Thrusters	Location	MA
Thruster	Right Leg	14
Thruster	Left Leg	14

Sensors	Location	Kills	Sensors	Communications
LH Class	Head	1	20 km	1800 km
Backup	Torso	2	1 km	300 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	4K	Melee	+0	1	U	Quick, Handy
Pulse Laser	Right Arm	2K	24	+1	2	U	BV3, All Purpose, Linked
Pulse Laser	Left Arm	2K	24	+1	2	U	BV3, All Purpose, Linked
Anti-Air Laser	Torso	1K	24	+1	1	U	BV2, All Purpose, Linked
Anti-Air Laser	Torso	1K	24	+1	1	U	BV2, All Purpose, Linked
SRM Tube	Right Pod	5K	64	+1	2	4	CMV, Crosslinked
SRM Tube	Right Pod	5K	64	+1	2	4	CMV, Crosslinked
SRM Tube	Right Pod	5K	64	+1	2	4	CMV, Crosslinked
SRM Tube	Right Pod	5K	64	+1	2	4	CMV, Crosslinked
SRM Tube	Right Pod	5K	64	+1	2	4	CMV, Crosslinked
SRM Tube	Right Pod	5K	64	+1	2	4	CMV, Crosslinked
SRM Tube	Right Pod	5K	64	+1	2	4	CMV, Crosslinked
SRM Tube	Right Pod	5K	64	+1	2	4	CMV, Crosslinked
SRM Tube	Right Pod	5K	64	+1	2	4	CMV, Crosslinked
SRM Tube	Left Pod	5K	64	+1	2	4	CMV, Crosslinked
SRM Tube	Left Pod	5K	64	+1	2	4	CMV, Crosslinked
SRM Tube	Left Pod	5K	64	+1	2	4	CMV, Crosslinked
SRM Tube	Left Pod	5K	64	+1	2	4	CMV, Crosslinked
SRM Tube	Left Pod	5K	64	+1	2	4	CMV, Crosslinked
SRM Tube	Left Pod	5K	64	+1	2	4	CMV, Crosslinked
SRM Tube	Left Pod	5K	64	+1	2	4	CMV, Crosslinked
SRM Tube	Left Pod	5K	64	+1	2	4	CMV, Crosslinked
SRM Tube	Left Pod	5K	64	+1	2	4	CMV, Crosslinked
IRM Rack	Right Leg	7K	1200	+1	2	3	Crosslinked
IRM Rack	Left Leg	7K	1200	+1	2	3	Crosslinked

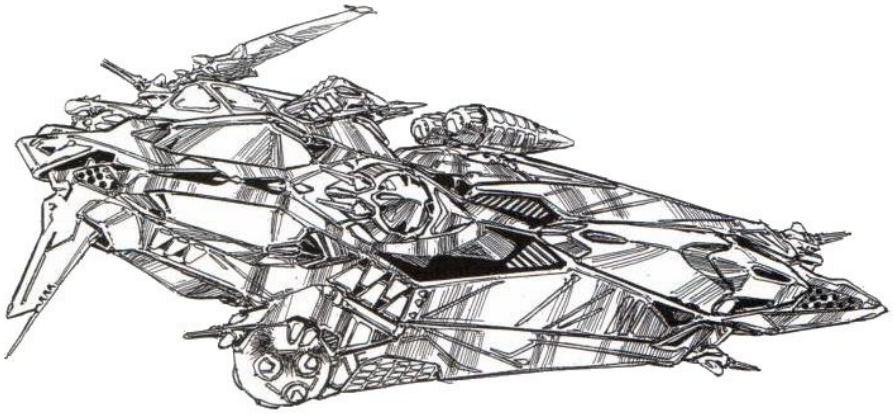
Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight, Storage Module, Escape Pod, Self Destruct
Spiritia Absorption Beam, Spiritia Storage Cell, Spiritia Defense System, Armored Canopy

Multipliers
Environmentals (Space, Re-entry, Desert), Verniers (1 Main Body, 1 each Arm/Leg), Variable Fighter Transatmospheric Ability, Superheavy Hydraulics, Supercharged Engines, Semi Monocoque, BCS/BDI

Programme: In 2030 November, several Zentraedi elements revolted on Earth, culminating in the Second [Defensive] Battle of Macross City. During these incidents, former Zentraedi soldiers (which had earlier deserted the 63254109th Zentraedi Outer Space Army) captured a VF-X-11 equipped with a fold booster. Thereafter, UN pilots began reporting sightings of a previously unknown variable combat device. This device, which they codenamed "Enemy Valkyrie" or "EVA" (pronounced "i-va"), shocked the United Nations Forces with its speed, power, and transformability. It incorporated the UN Forces' variable fighter technology with the Zentraedi Army's power suit technology, and its capabilities appear to approach, if not exceed, those of the UN's VF-19 and VF-22.

Untamed Class Destroyer

COST: 5,757,74 CP
Manufacturer: rumored to be Critical Path Corporation



HEIGHT: ?
WIDTH: ?
LENGTH: 160m
WEIGHT: ?
CREW: 5 command, 50 crew, 10 soldiers/security

Hull Class: Medium Heavy
KILLS: 1550
ARMOR: SP 80
SPACES: 16 + 10

MA: 34 (Mach 3)
Turn: +8
Crew Grade: B (14+1d10)

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Superheavy Laser (1)	F	500K	6,437,376	+1	500	U

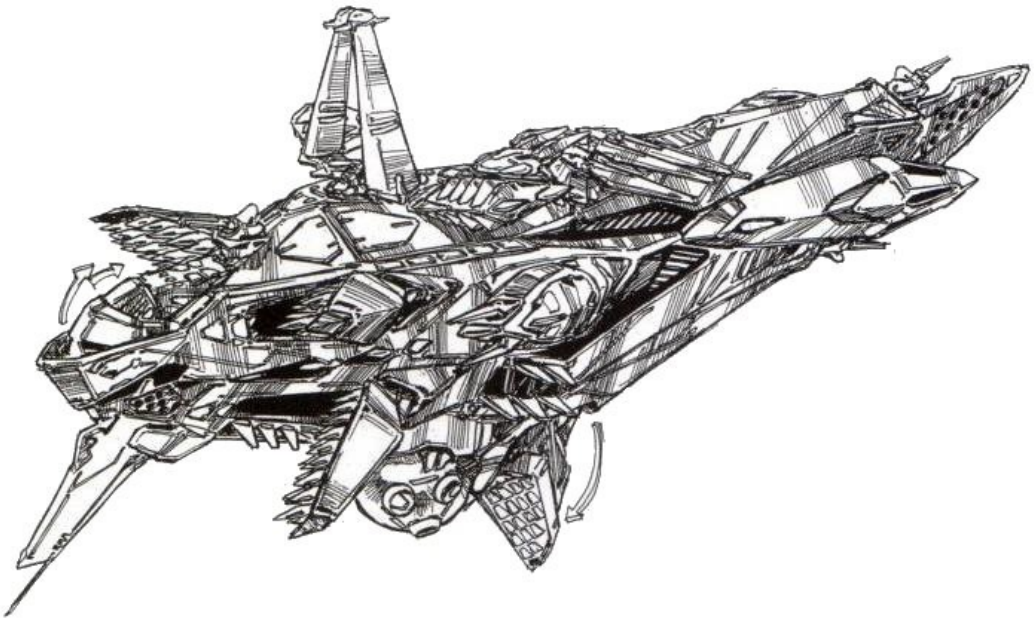
Warmup 1						
Medium Laser (4/2)	F/R	100K	250,000	+1	100	U
Light Laser (3)	T/S/S	50K	123,597	+1	50	U
Tri-Barrel Railgun (1)	F	40K	3,200,000	+1	40	300
BV3, Ammo is 3 Spaces 300K						
Strike Missile (2)	T	700K	6,437,376	+1	90	3
Each missile takes 25K to destroy. Blast 15, Warm up 2						
IRM Sponson (2)	S	7K	1200	+1	50	120
Can launch volleys of up to 12 missiles						
LRM Rack (2)	T	12K	127^2	+1	50	108
Blast 1, Can launch volleys of up to 36 missiles						
HMIRM Rack (4)	F	6K	70	+3	50	18
Can launch volleys of up to 18 missiles, Seek 2, Skill 20+						
Rotary Missile Rack	F	5K	64	+1	50	300
CMV, Can launch volleys of up to 100 missiles						

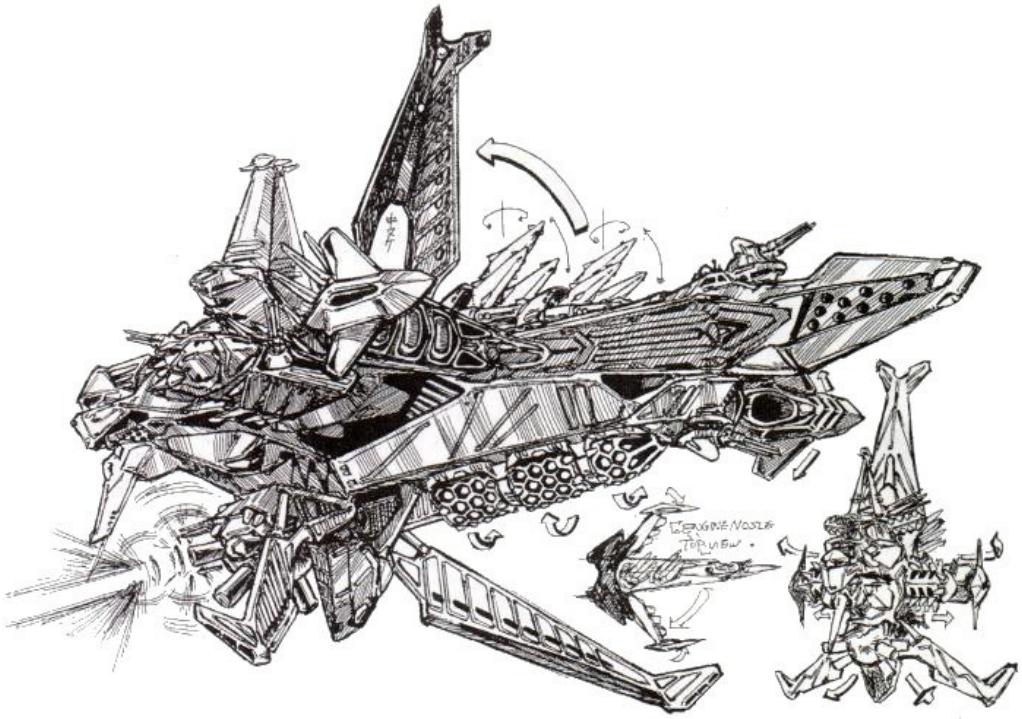
Mecha/Shuttle Compliment
None

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (100 for 20 years)
Pinpoint Barrier System (light), Antigravity Drive

Bays
Mecha: none
Crew: 1 bay (100 capacity)
Cargo: 1 bay (1800 ton capacity)
Medical Bay: none
Repair Bay: none

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade B (x0.6), Active Stealth (x0.8)





Programme: Developed by Anti-UN forces and sold to various terrorist groups. Designed as an alpha strike vessel; maximum firepower was chosen over survivability.

Notes: No weight is listed, so its hull class is estimated based on its size and function.

Vandal Class Variable Gunship

COST: 1,260,084 CP
Manufacturer: Black Rainbow Group

HEIGHT: ?
WIDTH: ?
LENGTH: 360m
WEIGHT: ?
CREW: 5 command, 65 crew, 20 soldiers/security

Hull Class: Mediumweight
KILLS: 1200
ARMOR: SP 60
SPACES: 12

MA: 34 (Mach 3)
Turn: +6
Crew Grade: B (14+1d10)

System	Kills	Range
MW Communications	200	1500 km
AH Sensors	300	3000 km

Weapon	Arc	DMG	Range	WA	Kills	Payload
Heavy Particle Cannon	FF	5000K	6,437,376	+3	2000	U
Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 5						
Light Laser (1)	F	50K	123,597	+1	50	U

Mecha/Shuttle Compliment
None

Optional Systems
Subspace Mass Sensors, Hyperspace Communications Array, Life Support (100 for 20 years)
Pinpoint Barrier System (light), Antigravity Drive

Bays
Mecha: none
Crew: 1 bay (100 capacity)
Cargo: 1 bay (1800 ton capacity)
Medical Bay: none
Repair Bay: none

Multipliers
Engines MA 34 (x1.1), Space Fold Generator (x1.0), Crew Grade B (x0.6), Active Stealth (x0.8)
Increased MV (x0.2)

VANDAL
CRUISER MODE

Programme: Developed by Anti-UN forces and sold to various terrorist groups.

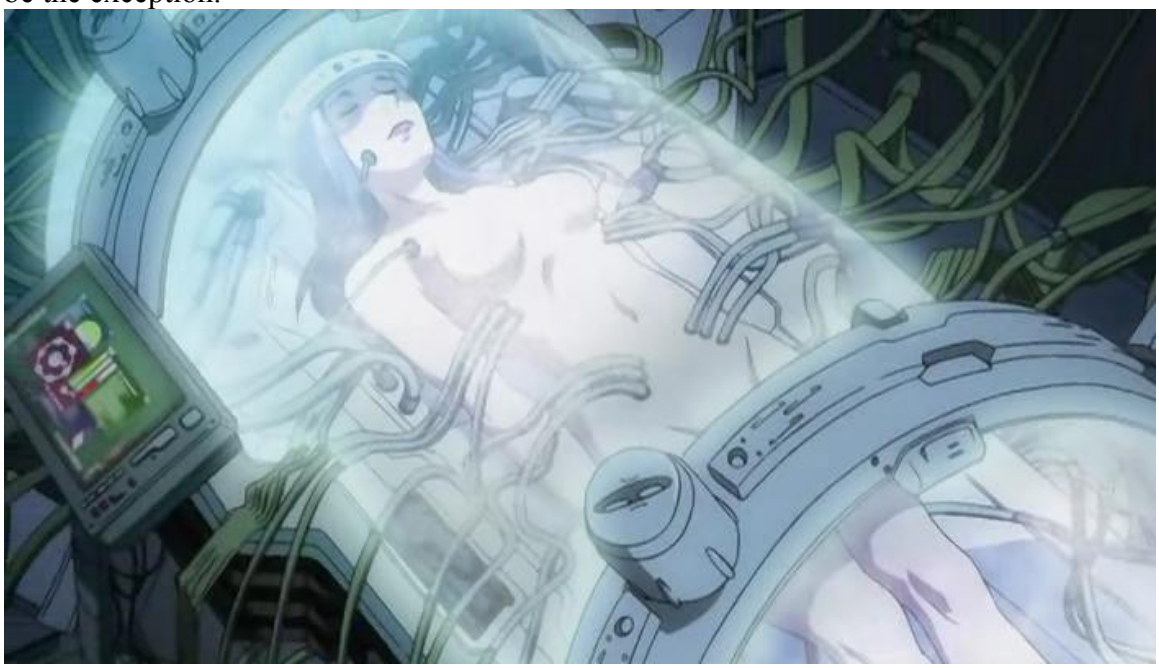
Notes:

No weight is listed, so its hull class is estimated based on its size and function.
Due to the design, the heavy particle beam cannon can be targeted individually.
The Vandal is very agile for a capital ship, gaining a +2 MV.

Chapter 12 – Cybertechnology

This chapter goes over cybernetics. Availability varies depending on the time period and location. Legality is set by independent colonies/fleets; for instance cybernetics are illegal on the Macross Frontier fleet, but they are standard on the Macross

Galaxy fleet. Cybernetics are largely unavailable until the mid to late 2040's. By 2059, cybernetics are so common that the fact Macross Frontier outlaws them is considered to be the exception.



Humanity and Cybernetics

In Cyberpunk, having cybernetics installed into a living body causes a degradation of the self, leading to a loss of humanity. Eventually, with too much replacement, a person will lose all empathy with humans and sink into a mental disorder known as cyberpsychosis. This usually manifests as a complete disregard for the sanctity of life for "meatbags". In Shadowrun, cybernetics cause a loss of Essence, which leads to death once you reach zero. In Palladium system, a person could be 99% cybernetic and never have to deal with mental degradation.

Humanity loss from cybernetics is an optional rule and may be disregarded by the GM. The only two *known* heavily converted characters in the series were Brera Stern and Grace O'Connor (although the entire ruling council of Macross Galaxy are assumed to be full prosthetic cyborgs as well, and with the proliferation of cybernetics onboard the Galaxy we can assume the vast majority have *some* degree of cybernetic replacement or augmentation); later they add in Project Stella with a fully converted 14 year old VF pilot. While neither showed the classic "kill all humans" cyberpsychosis, they both had personality traits that could easily be attributed to too much cybernetic replacement; Brera regarded himself as little more than a machine meant to do his job, and Grace wanted to take control of the entire galaxy and wipe out the Vajra.

When a person is reduced to 3 COOL due to cybernetics, he becomes something of a "cold fish" and doesn't interact well with others. At 2 COOL the character becomes distinctly cold and unpleasant to be around (he gives off bad vibes). At 1 COOL he becomes violent and bordering on total sociopathy. Once he drops to 0 COOL or below, he is fully gripped in cyberpsychosis (PCs become NPCs at this point).

Not all cyberpsychos are rampaging murder machines. Some develop more subtle symptoms such as compulsive lying, kleptomania, sadism/masochism, multiple personality disorder, bipolar disorder and so forth. A GM might allow a PC to develop these flaws (see Complications, but you don't get points back) and remain in play.

Example: A VF pilot is terribly injured in a crash and undergoes extensive cybernetic replacement, causing his Humanity rating to bottom out. Rather than becoming a raging psychopath, perhaps his love of variable fighters causes him to have his cybernetic body customized to look like a miniature variable fighter, and in time he comes to believe he *is* one. Or perhaps a pilot undergoes reconstruction to interface with a VF-27, and his cyberpsychosis makes him feel "naked" and vulnerable if he's not one with his variable fighter (which makes him feel god-like).

Tech Level vs. Humanity Cost

As above, it states that the introduction of mechanical components into the human body has a dehumanizing effect on them as their subconscious mind realizes the violation they have endured. Using the Tech Level charts (see Preface), it would place the Cyberpunk setting from which the list of cybernetics is drawn would be considered TL8. The Macross setting is considered to be TL10, which reduces the humanity cost of cybernetics to 0, surgery time reduced to 1/4 normal and surgery damage reduced by 1/2. This is because as a civilization's TL increases, the technology developed before that TL becomes more efficient, cheaper, safer and more reliable.

Brief History of Cybernetics in Macross

Cybernetics are new to humanity, only being available within the last 20 years. The Zentraedi have access to cybernetics from the Protoculture. Most Zentran high commanders have an implant replacing the right eye to give them better C&C ability. In time this device becomes more miniaturized for micronians, and even Autolmeur of the Macross 5 fleet had such a cyberoptic.

By the 2050's, cybernetic technology has advanced and spread throughout the UN colonies and fleets to the point that they are largely accepted. Only a handful of fleets and colonies restrict their availability, such as on Macross Frontier.

Why get Cybernetics?

There are many pros and cons to cybernetics:

Pros	**Cons**
• You can shut off pain when injured • Stronger, faster, more agile, etc • More durable, and can be internally armored • Doctors can't wait 3 weeks for organs • Virtual immortality at the most extreme	• Cybernetics don't heal naturally • Costly to maintain and repair • Possibility of cyberpsychosis • Vulnerable to EMP • Doctor can wait 3 weeks for parts

conversions	

Surgery Codes

Each cybernetic has a surgery code to indicate just how intrusive it is. The code also indicates the minimum required skills as well as the difficulty check to install or modify such components.

Negligible
Required: can be done in any mall clinic (Med Tech 4, Cyber Tech 4, DV 10)
Surgical Time: 1 hour
Surgical Damage: 1 hit
Surgical Costs: included with installation

Minor
Required: medical clinic (Med Tech 6, Cyber Tech 6, DV 15)
Surgical Time: 2 hours
Surgical Damage: 1d6+1 hits
Surgical Cost: 500 credits

MAjor
Required: hospital with surgery center (Med Tech 8, Cyber Tech 8, DV 20)
Surgical Time: 4 hours
Surgical Damage: 2d6+1 hits
Surgical Cost: 1500 credits

CRitical
Required: hospital with surgery center (Med Tech 10, Cyber Tech 10, DV 25+)
Surgical Time: 6 hours or more
Surgical Damage: 3d6+1 hits
Surgical Cost: 2500 credits or more

Cybernetics

Cybernetics fall into categories based on their function: cyberoptics, cyberaudio, cyberlimbs, implants, cyberweapons and full conversion bodies. Sometimes cybernetics are put into "packages" that have a reduced humanity loss because they are all done at once.

- Cyberoptics: These implants either splice into the optic nerve, or replace the eye completely.
- Cyberaudio: This splices into the ear nerves or replaces them totally.
- Cyberlimbs: This replaces as little as a single digit up to replacing the entire limb. By themselves they do not grant superhuman strength, as they still anchor to meat and bone.
- Cyberweapons: These are weapons added into existing cybernetic implants or limbs.
- Neural Implants: These are implanted in the brain or along the spine and tap into the person's nervous system.

- Implants: This is the catch all for dozens of other types of cybernetic devices such as datajacks or tech hair.
- Full Conversion Bodies: This is the most extreme cybernetic replacement where all but the brain is replaced.. and sometimes even that is replaced too.

The list below is not a complete compilation from Cyberpunk and the four Chromebooks, just a listing of ones that are more likely to show up in Macross.

Cyberoptics

All listings are for a single cyberoptic unless stated otherwise. All cyberoptic options are surgery code N if upgrading an existing cyberoptic.

Cyberoptics (basic) [MA, HC 2d6, Cost 500 credits]
Has 4 option slots. Matches basic human vision.

Monovision Cyberoptics [MA, HC 3d6, Cost 650 credits]
This replaces both eyes and the entire optic ridge with a single cyberoptic. It grants +1 to visual Awareness/Notice rolls and +1 to initiative and surprise rolls. It has 180 degree vision front and 225 degrees to peripheral vision. Has 6 option slots.

Image Enhancement [HC 1, Cost 300 credits]
Grants +2 to Awareness/Notice rolls using visual search.

Targeting Scope [HC 2, Cost 400 credits]
Grants a +1 WA bonus when using a smartgun.

Times Square Marquee [HC 1, Cost 300 credits]
Has a scroll bar at the top of your vision that can display text information.

Times Square Plus [HC 2, Cost 500 credits]
Improved version of Times Square Marquee that includes a cognitive-reflex processor which allows visual recognition, identification and information retrieval. Allows data feed, overlays and "picture-in-picture" over your vision. Takes up 3 option slots.

Color Shift [HC 0.5, Cost 300 credits]
Allows you to change your iris color; includes options such as chrome or cat eyes.

Teleoptics [HC 0.5, Cost 150 credits]
Grants up to 20x telescopic.

Micro-optics [HC 0.5, Cost 150 credits]
Grants up to 20x microscopic.

Antidazzle [HC 0.5, Cost 200 credits]
Immune to flash, snow blindness, flares, etc. Also functions as polarized sunglasses.

Lowlight [HC 0.5, Cost 200 credits]
High quality light enhancement option. See in almost total darkness.

Thermographic Vision [HC 1, Cost 200 credits]
See heat patterns.

Infrared [HC 1, Cost 200 credits]
See the electromagnetic spectrum below visible red light.

Ultraviolet [HC 1, Cost 200 credits]
See the electromagnetic spectrum above visible violet light.

Micro Recorder [HC 0.5, Cost 300 credits]
Record up to 1 hour of video (requires 2 option slots).

Digital Camera [HC 0.5, Cost 300 credits]
Take up to 100 high quality photos (requires 2 option slots).

Cyberoptic Compass [HC 1, Cost 300 credits]
Functions as a standard compass that points to magnetic north on most standard worlds. For an additional 100 credits, this can be upgraded to a galactic compass that points towards the galactic core as well. Requires Times Square cyberoptics for display.

Optical Splice [M, HC 0.5, Cost 500 credits]

This is not a full cyberoptic. This splice allows those with access to see/record what the person sees.

Zentraedi Ocular Implant [MA, HC 2d6, Cost 1000 credits]

This optical piece is implanted on the right eye typically, and wraps partially around the side of the head almost up to the ear. It gives the Zentraedi commander a single cyberoptic with Times Square Plus, Teleoptics and Image Enhancement. It can link up to a combat computer to give battle assessment information.

Cyberaudio

All cyberaudio options are surgery code N if upgrading existing cyberaudio.

Cyberaudio (basic) [M, HC 2d6, Cost 500 credits]

Amplified Hearing [HC 1, Cost 200 credits]

Grants +1 bonus to Awareness/Notice on audio searches.

Radio Link [HC 1, Cost 100 credits]

Radio receiver/transmitter with 5km range.

Frequency Changer [HC 0, Cost 100 credits]

Program in up to six frequencies on your radio link.

Cellular Splice [HC 1, Cost 150 credits]

Allows cellular phone communications if in range of a network. Also allows use of the Galaxy Network with a Neural Processor and Times Square Marquee.

Scrambler [HC 0.5, Cost 100 credits]

High end scrambler for all communications options.

Bug Detector [HC 0.5, Cost 200 credits]

Detect wire taps and listening bugs up to 3m with 60% accuracy.

Voice Stress Analyzer [HC 1, Cost 200 credits]

Grants a +2 bonus to Human Perception, Interview and Interrogation rolls.

Enhanced Hearing Range [HC 2, Cost 150 credits]

Hear into the ultrasonic and subsonic ranges.

Entertainment Suite [HC 0.5, Cost 100 credits]

Private stereo system. Requires a datajack, radio link or other source of music.

Radar Detector [HC 0.5, Cost 150 credits]

Detect radar “pings” with 40% accuracy.

Tight Beam Radio Link [HC 1, Cost 200 credits]

Allows untappable communications with a target in line of sight.

Wide Band Radio Scanner [HC 2, Cost 100 credits]

Expands the Radio Link to scan all transmissions on all bands.

Micro-recorder Link [HC 0.5, Cost 100 credits]

Transmits what you hear to a recorder.

Sound Compensation [HC 0.5, Cost 300 credits]

Automatically adjusts your cyberaudio for low/high noise levels.

Stereo Implant [N, HC 0, Cost 200 credits]

Micro speakers are implanted in the bone of the skull next to the ear to allow you to listen to music privately without needing full cyberaudio.

Cyberlimbs

Basic cyberlimbs have 20 hits (30 hits to destroy) and are SP 10. Cyberarms inflict 1d6 damage on a punch or 2d6 by crushing with the hand. Cyberlegs inflict 2d6 with a kick. This assumes no torso reinforcement unless specified. With a pair of cyberlegs, you can jump 6m or 8m with a running start. All cyberlimbs at base level will match the owner’s STR, BOD and AGIL. Cyberlimbs may only have one covering option.

Cyberarm (obvious) [CR, HC 2d6, Cost 3000 credits]
Has 4 option slots.
Cyberleg (obvious) [CR, HC 2d6, Cost 2000 credits]
Has 3 option slots.
Quick Change Mount [HC 2, Cost 200 credits]
Allows you to swap limbs in 1 turn.
Hydraulic Rams [HC 3, Cost 200 credits]
Increase SDP to 30/40 and triple damage from that limb.
Thickened Myomar [HC 2, Cost 250 credits]
Increase SDP to 25/35, double damage from that limb, +50% range on leaps if used on legs.
Reinforced Joints [HC 1, Cost 200 credits]
Increase SDP by +5.
Artificial Shoulder Mount [CR, HC 2d6, Cost 1500 credits]
Adds an additional pair of cyberarm mounts (maximum of 4 arms). Cyberarms cost separately.
Tempest Hardening [HC 1, Cost 300 credits]
Limb is shielded against microwaves and EMP.
Cover: Plastic [HC 1, Cost 100-200 credits]
Transparent, colored, textured, whatever you like.
Cover: Realistic Skin [HC*, Cost 200 credits]
Not only is it a Difficult task to notice they aren't real, they reduce cyberlimb HC by 1d6/2.
Cover: High Polish Chrome [HC 3, Cost 200 credits]
Highly reflective chrome in any metallic color.
Cover: Armor [HC 1d6, Cost 200 credits]
Increase SP to 25.
Standard Cyberhand [HC -, Cost 200 credits]
Basic model.
Standard Cyberfoot [HC -, Cost 200 credits]
Basic model.
Stealth Foot [HC 1, Cost 150 credits]
Grants a +1 bonus to Stealth rolls.
Leg Boosters [HC 1d6, Cost 500 credits]
This option is only available with a pair of cyberlegs and uses two option slots in each leg. They increase leaping distances by 3m. The legs automatically have the Reinforced Joints option, and cannot be used with Thickened Myomar or Hydraulic Ram options.
Speedster Cyberlegs [CR, HC variable, Cost variable]
Both versions include a pair of cyberlegs with Thickened Myomar. The basic package grants +3 MA and +1 maneuver rolls for HC 3d6 and 4500 credits. The advanced package grants +8 MA and +2 maneuver rolls for HC 3d6+4 and 5000 credits. Both versions replace/reinforce the pelvis and lower ribs/spine.
Modular Tool Hand [HC 2, Cost 600 credits]
Fingers contain miniature tools such as a screwdriver, wrench, small drill, etc.
Medical Modular Hand [HC 1d6+2, Cost 975 credits]
This cyberhand has a scalpel, four-dose air hypo, dermal stapler, dual-purpose clamp/forceps and a basic biomonitor probe. If attached as an independent cyberhand, it has surgery code MA.
Independent Cyberhand [MA, HC 1d6, Cost 750 credits]
This is just a cyberhand for use with a flesh arm. It can mount four finger options or one hand option. It can crush for 1d10 damage and has SDP 7/10.
Quick Draw Holster [HC 1, Cost 300 credits]
Only available with cyberlimbs. This allows you to draw a small weapon such as a knife or light pistol as a free action.
Cyberfinger Quick Change Mount [HC 1, Cost 150 credits]
Allows cyberfingers to be swapped out in 1 turn.
Cyberfinger Flesh Mount [M, HC 1, Cost 100 credits]
Allows the mounting of cyberfingers without replacing the entire hand.
Cyberfinger: Dartgun [HC 2, Cost 100 credits]
Single shot dartgun.

Cyberfinger: Lockpick [HC 0.5, Cost 50 credits]
Grants a +3 bonus to Pick Locks rolls against non-electronic locks.
Cyberfinger: Light Pen [HC 0.5, Cost 45 credits]
For use with computer screens and graphics tablets.
Cyberfinger: Mini Light [HC 0.5, Cost 25 credits]
Miniature flashlight good out to 25m. Battery lasts 12 hours and costs 1 credit to replace.
Cyberfinger: Finger Bomb [HC 2, Cost 150 credits]
Detach and throw to inflict 2d6+3 damage to a 3m blast radius.
Cyberfinger: Cutters [HC 1, Cost 50 credits]
Takes two finger options; the middle and index fingers. Can inflict 1d2 damage.
Cyberfinger: Chemical Spray [HC 2, Cost 150 credits]
Holds 2 bursts of any chemical or poison spray.
Cyberfinger: Video Recorder [HC 2, Cost 400 credits]
Can transmit video to a recorder or to Times Square cyberoptic options. Can come with passive infrared (200 credits), teleoptics 10x (225 credits) or lowlight vision (100 credits); only one option per finger.
Cyberfinger: Self-Propelled Grenade [HC 2, Cost 200 credits]
Has a range of 7m and inflicts 2d6 damage to a 2m radius. Replacement grenades are 25 credits each. Typically regarded as black market cyber.
Cyberfinger: Air Hypo [HC 1, Cost 200 credits]
Holds enough air and fluid for 4 injections. Replacement air cartridges are 3 credits.
Cyberfinger: Tracking Device [HC 0.5, Cost 300 credits]
Has a transmitter range of 3km and displays information to Times Square. Launcher has a range of 3m and holds 2 magnetized tracer bugs.
Cyberfinger: Lighter [HC 2, Cost 25 credits]
Holds enough fuel for 2 hours of constant use. Replacement fuel cartridges cost 1 credit.
Cyberfinger: Datajack [HC 0.5, Cost 150 credits]
Cannot be used with Cyberfinger quick change mount. The end of the finger opens to reveal a standard male plug for datajacks.
Cyberfinger: Parabolic Microphone [HC 2, Cost 350 credits]
Requires cyberaudio. Only available with full cyberarms. This functions as a parabolic microphone with built in level dampening, allowing you to hear as if you were 20 times closer.
Cyberfinger: Flasher [HC 1, Cost 250 credits]
The fingertip can be removed to reveal a powerful flashbulb that can blind targets for one minute (-4 all rolls) if they fail a Difficult AGIL roll to look away. Replacement bulbs cost 25 credits (single-use).
Cyberfinger: IR/UV Flashlight [HC 1, Cost 200 credits]
This finger can project infrared and ultraviolet light up to 10m for use with the appropriate cyberoptic targeting options.
Cyberfinger: Flare [HC 2, Cost 200 credits]
This finger has a detachable flare that can reach an altitude of 150m and negates darkness penalties in a 25m diameter. Replacement flares cost 15 credits; available in red, green and white. If used as a weapon the range is 35m and inflicts 1d3 for 2 rounds.
Cyberfinger: Storage [HC 0.5, Cost 75 credits]
Holds a small amount.
Cyberfinger: Laser Pointer [HC 0.5, Cost 150 credits]
Has a range of 20m. Great for doing presentations or playing with your cat. Can also be used as a laser designator if placed along the length of a firearm.
Cyberfinger: Derringer [HC 2, Cost 250 credits]
Has a single-shot 5mm round in the fingertip (Range 20m, Damage 1d6, -2 WA).
Cyberfinger: Ballpoint Pen [HC 0.5, Cost 25 credits]
Can even write in zero-G and underwater. Comes in dozens of colors; quick change ink cartridges cost 2 credits each.

Cyberweapons

Nails [N, HC 2d6, Cost 100 credits]
Reinforced fingernails that inflict 1d3 damage.
Claws [M, HC 3d6, Cost 400 credits]
Extendable finger blades that inflict 1d6+3 AP damage.
Blades [M, HC 3d6+1, Cost 600 credits]
Extendable forearm blades that inflict 3d6 AP damage.
Taser [N, HC 1, Cost 100 credits]
Taser built into the hand or forearm (BOD check DV 20 or stunned 1d6 minutes) with 10 charges.
Vampire Fangs [N, HC 2d6, Cost 200 credits]
Fangs inflict 1d3 damage on a bite. Fangs can be made retractable by increasing the surgery code to M and the cost to 500 credits.
Light Gun [N, HC 1d6, Cost 600 credits]
Requires a cyberlimb. This implants a 9mm handgun with a clip of 20.
Medium Gun [N, HC 1d6+1, Cost 800 credits]
Requires a cyberlimb. This implants a 10mm handgun with a clip of 15. Takes up 2 option slots.
Heavy Gun [N, HC 1d6+2, Cost 1000 credits]
Requires a cyberlimb. This implants a 12.7mm shortbarrel rifle with a clip of 5. Takes up 3 option slots.
Shotgun [N, HC 1d6+2, Cost 750 credits]
Requires a cyberlimb. This implants a 12g shotgun with a clip of 5. Takes up 3 option slots.
Micromissile Racate [N, HC 1d6+3, Cost 1200 credits]
Requires a cyberlimb. This implants a micromissile rack (4d6 damage, range 300m, clip 4). Takes 3 option slots.

Neural Implants

Neural Processor [M, HC 1d6, Cost 1000 credits]
This is required to use any of the other options found under Neural Implants.
Reflex Booster [HC 1d6 per level, Cost 500 per level]
Grants a +1 bonus to initiative rolls per level, up to +3.
Taste Boost [M, HC 2, Cost 100 credits]
This enhances your receptivity and interpretation of the four basic tastes; sweet, sour, salty and bitter. Grants a +2 bonus to all taste based Awareness/Notice rolls.
Tactile Boost [HC 2, Cost 100 credits]
Grants a +2 bonus to all touch based Awareness/Notice rolls.
Olfactory Boost [HC 2, Cost 100 credits]
Grants a +2 bonus to all scent based Awareness/Notice rolls. Allows tracking by scent.
Pain Editor [HC 2d6, Cost 200 credits]
You can dull or shut out all pain sensations, including heat and cold.
Cybermodem Link [HC 1, Cost 100 credits]
Allows you to access the Galaxy Network through the nearest node. Has a range of 5km.
Vehicle Link [HC 3, Cost 100 credits]
Allows you to directly control any vehicle or mecha modified for such use. Has a range of 10km.
Smartgun Link [HC 2, Cost 100 credits]
Allows you to control any weapons modified to be smartguns.
Machine Link [HC 2, Cost 100 credits]
Allows you to control machinery modified to allow remote control.
Datajack [HC 1d6 per pair, Cost 200 per pair]
Allows direct cable interface with machinery, vehicles, weapons, mecha, data terminals, etc.
Chip Reader [HC 1d6/2, Cost 200]
Can store up to 20 chips. Chips can be accessed via on-body computer or other means.
Fold-Link [HC 4, Cost 8000 credits]
This is only available on the Macross Galaxy, and only if you are working with the ruling council of that fleet (this includes controlled minions). This device combines a cybermodem link with fold quartz

and allows one to access the Galaxy Network in realtime with almost no lag, granting communication across the galaxy in a fraction of a second.

Wet Drive [HC 1d6, Cost 320 credits]

This internal memory storage unit can hold up to 100 TB (terabytes) of information. Each additional 50 TB of information storage cost an additional 150 credits up to a maximum of 500 TB space.

Wet Drive Access Link [HC 1d6/2, Cost 200 credits]

This allows a person with a wet drive to access the information without need of external cables. Information may be displayed on Times Square cyberoptics.

On-Body Computer [MA, HC 1d6+4, Cost 1750 credits]

This micro computer suite is implanted in the body and requires cyberoptics with Times Square and cyberaudio to use. It can be linked into a chip reader and wet drive if available (for an additional 125 credits). Tempest hardening costs an additional 600 credits (take additional 1d4 damage if fried). Equivalent to a Power 5 laptop.

Combat Implant [M, HC 1d6+6, Cost 20,000 credits]

The combat implant is used to form a cybernetic link between a pilot and a variable fighter (or other mecha type). The main difference between this and a cyber-link is that the implant itself provides the combat skills. Thus with this implant, a civilian who has never even *seen* a variable fighter can fight on equal footing with trained veterans.

The implant contains a low level AI that provides rank 6 in the following skills: Mecha Pilot: VF Series, Mecha Weaponry, Mecha Combat, Pilot: Jet, Tactics and Radio Communication. Similar to the BDI/BCS, the pilot uses their INT in place of REF/DEX, and can take advantage of neural enhancements that boost mental processing ability.

Implants

Vox Implant [M, HC 2d6, Cost 700 credits]

Vocal synthesizer. Can create many audio effects with the voice, granting a +2 bonus to Performance/Sing rolls.

Vox Plus Implant [CR, HC 2d6, Cost 850 credits]

Throat area has SDP 15. This can have any three vox options at half cost and no further HC loss.

Ultrasonic Modification [HC 2, Cost 350 credits]

Using ultrasonics while speaking, this grants a +1 bonus to Seduction and Persuasion/Fast Talk skill checks.

Voice Pattern [HC 2, cost 350 credits]

When used with cyberaudio or some other source of audio, you can exactly emulate the voice of another person.

Voice Scrambler [HC 2, Cost 50 credits]

This option makes your voice sound so electronic that it cannot pass as a human voice. It can be read by a cellphone scrambler option.

Echolocation System [HC 1d6/2, Cost 800 credits]

This requires two cyberoptics with video imager, vox implant (or vox plus) and cyberaudio with enhanced hearing range. With this option you can “see” in absolute darkness. While it works in near-realtime, you suffer a -1 penalty to Awareness/Notice rolls (-2 if dealing with colors and textures). A “white noise” generator will negate this system.

Gyro-Stabilizer [M, HC 1d6, Cost 1000 credits]

Grants a +1 bonus on Zero-G Maneuvering and Athletics rolls as well as a -2 on Space Adaptation Sickness rolls.

Cyber Teeth [M, HC 1d6/2, Cost 200 credits]

Permanently straight, white teeth. Plus, they are fused to the jawbones, making it hard to knock them out.

Reinforced Jaw [MA, HC 1, Cost 100 credits]

Grants +2 damage with bite attacks.

Nasal Filters [M, HC 2, Cost 60 credits]

Stops fumes and toxic gasses with 70% effectiveness.

Gills [MA, HC 3d6, Cost 400 credits]

Allows underwater breathing for 4 hours.

Internal Air Supply [MA, HC 2d6, Cost 300 credits]

Good for 25 minutes.

Sexual Implant [MA, HC 1d6, Cost 300 credits]

Male, female or both. Replaces the genitals with high-durability replicas that can go all night without a break. Customized texturing/coloring available.

Contraceptive Implant [N, HC 0, Cost 100 credits]

Good for 5 years with 99% efficiency. May be illegal in some colonies.

Adrenal Booster [M, HC 2d6, Cost 400 credits]

Boosts DEX by +1 for 1d6+2 turns up to 3 times per day.

Livewires [M, HC 1d6, Cost 500 credits]

Livewires are a cybernetic version of computer controlled cables. They are prehensile (STR 1) and can be used to connect to any datajack.

Full Body Conversion

Solid State [CR, HC 4d6, Cost 50,000 credits]

Your entire mind, personality and memories are digitally recorded and can be transferred or copied into another body in about one hour. As long as your backup is safe, and there is someone to download it into a new body shell, you are effectively immortal. Periodic backups are recommended to keep recently learned skills/knowledge up to date.

Human Replica Body [CRx2, HC 16d6+2, Cost 55,000 credits]

REF 10, DEX 10, BOD 12, ATTR 2-10, MA 10

This body type mimics a natural human (or Zentraedi) to the point it requires a Nearly Impossible (DV 30) Awareness/Notice roll to spot the fake (although a proper scanner will spot it immediately). The body's BOD type appearance can be set without effecting the actual BOD stat. Body is available as male, female, transgender (MtF and FtM), genderless and hermaphrodite, and can be made as human, Zentraedi or Zolan.

Head (SP 20, SDP 20/30), Torso (SP 25, SDP 30/40), Arms (SP 25, SDP 20/30), Legs (SP 25, SDP 20/30). Options include: 2x basic cyber hand, 2x basic cyber foot, basic cyberoptics, basic cyberaudio, Options: Real Skin on all locations and optional sexual implant(s).

Customization [N, HC variable, Cost variable]

This includes a catch-all for any cosmetic alteration to a full body conversion. Bonuses are dependent on the type: the Sorayama chrome femme-bot look may grant a +2 bonus to Seduction, while a monstrous appearance might grant a +2 bonus to Intimidation.

Increased Armor [N, HC 0, Cost 2000, 4000 or 6000 credits]

This increases the SP of all body locations by +5 and +5kg (2000 credits). This can be increased by +10 SP and +12kg (4000 credits) or +15 SP and +25kg (6000 credits). The maximum increase is +40 SP.

Increased Structure [N, HC 0, Cost 1500 credits]

This increases the SDP of all body locations by +5 and +25kg. The maximum increase is +20 SDP. Each increase also makes the body slightly larger.

Increased Stats [N, HC 2, Cost variable]

REF/DEX: 2000 credits per +1 to a maximum total of 15

MA: 500 credits per +1 to a maximum total of 25

BOD: 1000 credits per +1 to a maximum total of 20

STR: 750 credits per +1 to a maximum total of 20

Tempest Hardening [N, HC 6, Cost 2000 credits]

Grants RSP 30 against microwaves, cosmic radiation and EMP effects.

Biopod [N, HC 18d6, Cost 20,000 credits]

This option may only be purchased at the time of the full body conversion operation. This allows a person to be able to swap bodies (with assistance) as needed, taking about a half hour to synchronize with the new body.

Longevity Module [N, HC 1, Cost 15,000 credits]

This option includes a medical scanner, biomonitor, chemical analyzer and other options to increase the lifespan of the cyborgs. Theoretically this will triple the natural lifespan of the individual and makes them immune to all diseases, although the technology hasn't been around long enough to test the lifespan.

Slave Link [N, HC 2d6, Cost 7000 credits]

This device is usually attached externally to a full conversion body via a datajack. It allows someone with the access codes to suppress the cyborg's mental control over their own body and remote control it like a puppet or give it pre-designated commands. If combined with a cybermodem or fold-link, it can be used over distances.

Chapter 13 – Mecha History & Notes

While the timeline of the basebook includes the starting and ending dates of the use of most mecha, this chart is a handy quick reference for what years a particular mecha was available.

Year	Mecha Notes
199X	* Attempts at building a pre-OT ET series destroid fails without the proper systems yet to be developed from reverse-engineered Overtechnology
1999	* Inspection Army Meltran gunship crashes on Earth and is labeled ASS-1 (alien star ship 1)
2000	* OTEC forms and begins reverse-engineering overtechnology found on the ASS-1; design of HWR destroid series; development of SIMM-77 missile
2001	* Design of destroid MBR series; development of hyper-carbon alloy
2002	* Design of Tomahawk
2003	* Development of VF-X-1 and VF-X-2; design of Sparta
2004	* Development of RMS-1
2005	* Development of VF-X-3 and VF-X-4; trial production of Cheyenne, Masamune Mk I and Monster Mk I
2006	* Trial of VF-X; trial production of Cheyenne and Masamune; development of Tomahawk
2007	* Test flight of VF-X1; trial production of VF-0 due to problems with thermonuclear engines; mass production of Tomahawk; rollout of Sparta
2008	* Sparta upgraded to Spartan; rollout of Monster Mk I; rollout of VF-0; maiden flight of VF-1A; Masamune Mk I production stopped to focus on heavy combat units
2009	* Rollout of Defender, Phalanx, Maverick and Monster Mk II
2010	* Plans for VF-X-2 and VF-X-3 lost when earth was annihilated; use of RMS-1 missile
2011	* Development of VF-5000; trial production of Monster-X; mass production of Masamune Mk II
2012	* Mass production of VF-4
2013	* Test flight of VF-5; rollout of RMS-2 missile
2014	* Rollout of Monster-X
2015	* Mass production of VF-5; end of production for VF-1 with over 6,000 units made, last production run has a commemorative paint scheme
2016	
2017	
2018	* Test flight of VF-5000; development of VF-9
2019	
2020	* Mass production of VF-5000; VF-4 replaces VF-1 as standard fighter
2021	* Trial production of Big Monster

2022	* End of production for VF-4 with 8245 units made; development of VF-11
2023	* End of production for VF-5; mass production of VF-9; development of Monster Turret; rollout of RMS-3 missile
2024	* Rollout of Big Monster
2025	* Development of VF-14 & VA-14; upgrade remaining VF-1 to 1X units; trial/fail of War Monster
2026	* Development of VF-17; rollout of Monster Turret
2027	* Test flight of VF-14
2028	* Test flight of VF-11; mass production of VF-14; design of VF-10
2029	* End of production for VF-5000 and VF-9
2030	* Mass production of VF-11 & replaces VF-4 as standard fighter; mass production of VA-14
2031	
2032	* Development of active stealth system using F-14 Tomcats as a test bed; mass production of VB-6
2033	
2034	* Development of YF-19 & YF-21; test flight of VF-17
2035	* Development of VAB-2; rollout of VF-17
2036	* Upgrade remaining VF-1X to 1R units
2037	* Rollout of Dehawk
2038	
2039	* Project Supernova; testing of prototype YF-19 & YF-21
2040	* Conclusion of Project Supernova; upgrade of all VF-11B to 11C model
2041	* VF-19 chosen as next-generation fighter
2042	* VAB-2 deployment, VF-22 chosen for special operations fighter
2043	
2044	
2045	* Upgrade of all VF-11C/D to 11E/F model; rollout of Sound Force; rollout of Jammingbirds
2046	* Test flight of VF-171
2047	* Upgrade all VF-17 to have PPB system; VAB-2 becomes standard bomber
2048	* Upgrade remaining VF-11 to 11G units; production of VF-11 ends; testing of SW-XA-1
2049	
2050	* Upgrade remaining VF-1R to “plus” units; rollout of VB-6; VF-171 becomes main fighter
2051	
2052	
2053	
2054	
2055	
2056	
2057	* Simulations of the YF-24 pass; Test flight of VF-25; test flight of VF-27
2058	
2059	* Rollout of VF-25; rollout of VF-27; rollout of VF-171EX; test of YF-29

Notes

1) The information about the SW-XA series is fan-made work that has been made to fit logically into the official timeline. This may or may not actually be the YF-24 Evolution.
2) The dates for the RMS-2 and RMS-3 are estimates.
3) The VF-11 -E, -F, and -G models are fan-made logical extrapolations, and are thus optional.

Conventional Vehicle Notes

Some source material states that in the mid to late 1990’s there was an M1 Abrams tank upgraded to include a turbine engine, and that the MBT-97 Fubirai was the last caterpillar-tread styled tank. After this, attempts were made to create the Earth Trekker series of destroids as walking tanks with increased firepower and mobility over traditional tanks.

With the inclusion of Macross Zero (circa 2008), the M1A1 Abrams was the standard in ground tanks and there was no mention of these ET destroids, only the Cheyenne and the Monster Mk I. As with the mecha, any conventional vehicles pulled from non-anime sources that are considered “canon” will be listed as optional.

Variable Fighter +10 Theory

The +10 theory is something that Dave Ogawa (Macross RPG site) came up with because of a trend in variable fighters.

First generation of fighters (Zero/Macross/FB2012/M3)

VF	Purpose	Manufacturer
VF-0	Main-line fighter (prototype)	Shinnakasu
VF-1	Main-line fighter	Shinnakasu
VF-4	Heavy main-line fighter	Shinsei Heavy Industries
VF-5	Lightweight colonial fighter inspired by F-5	?
VF-6	Lightweight colonial fighter, no details.	?
VF-7	Colonial fighter, no details.	?
VF-9	Forward-swept-wing high-agility fighter	Shinsei Heavy Industries

Second generation (Plus/7/VF-X2)

VF	Purpose	Manufacturer
VF-11	Main-line fighter	Shinsei Heavy Industries
VF-14	Heavy main-line fighter	General Galaxy/Messer
VF-15	High speed interceptor	General Galaxy
VF-16	High speed interceptor	Shinsei Heavy Industries
VF-17	Stealth fighter/bomber	General Galaxy
VF-19	Forward-swept-wing high-agility fighter	Shinsei Heavy Industries
VF-22	Special operations stealth fighter	General Galaxy

Third generation (Frontier)

VF	Purpose	Manufacturer
VF-171	Main-line fighter	General Galaxy
VF-25	General Fighter	Shinsei Heavy Industries/Macross Frontier/L.A.I.
VF-27	Special Operations Stealth fighter	Macross Galaxy
VF-29	Anti-Vajra fighter	Shinsei Heavy Industries/Macross Frontier/L.A.I.

Now, there are some trends that emerge, like the VF-1/VF-11 main-line fighter, the VF-4/VF-14 heavy fighter, and the VF-9/VF-19 FSW fighter. The trend, therefore, indicates that the last digit is an unofficial mission designator. The YF-21 may have been General Galaxy's intent that their VF should be the new main-line fighter as a third-generation mecha.

Little information is known about the VF-15 and VF-16 other than they were competitors to create a high-speed interceptor to assist the VF-17.

Variable Fighter Experiment

2005 – Advancement of the secondary VFX (Variable Fighter eXperimental) program is begun. Development of the VF-X-3 Medusa by Stonewell-Bellcom competes against the VF-X-4 Siren by OTEC.

2009 – Limited development is allowed by third party developers in the VSFX (Variable Space Fighter eXperimental) program and Northrom Corporation begins developing the VF-X-5 series.

2011 – Stonewell-Bellcom begins developing VF-X-? under the codename Evolution.

2018 – Second VSFX program begins. First flight of the VF-5000 by Shinsei Heavy Industries. General Galaxy company begins development of the VF-X-9 Cutlass.

2022 – Third VFX program begins with a request for a GVF (General-purpose Variable Fighter) capable of undertaking multiple mission roles. This is codenamed Project Nova. Shinsei Heavy Industries begins development of the YF-11 Thunderbolt, abolishing the tradition of the -X fighter designation.

2025 – General Galaxy expands on the GVF project based on the VF-X-12 opposite of the YF-11. This is kept a top military secret. It is later developed as the YF-14.

2039 – Fourth? VFX program, codenamed Supernova is conducted on planet Eden at New Edwards Test Base. Shinsei Heavy Industries introduces the YF-19 to compete with General Galaxy's YF-21. The project also brings forth new systems such as the mecha-scale pinpoint barrier and the active stealth system.

Chapter 14 – Converting into Mekton

This includes converting from Palladium systems as well as converting the "real" statistical data provided for ships and mecha found.

Mecha

Ok first of all, Kevin Siembieda (Palladium system) has severely overstated the armor and damage capacities of the VF series in general. While they do possess armor far surpassing what modern technology can accomplish (i.e. hyper-carbon alloy) and their SW-AG energy conversion system, the VF series are predominantly dogfighters and interceptors, not battle tanks – that is the role of the destroid. Based on the anime, even the VF-1 could still withstand several light weapon hits, but were typically destroyed by a direct hit or a volley of missiles. To represent this, most VF series are built as Striker class up to Mediumweight for the most advanced models. See the notes on MDC conversion below.

Capital Ships

Converting the capital ships of the Macross universe into Mekton is tricky since the sheer number of weapons and mecha/crew compliment far exceeds the spaces allotted by hull size. Even using space efficiency on weapons, it simply is not possible to fit everything that should be there into the space allotment. The main problem is that most capital ships are much larger and heavier than the hull size listing in the Mekton book reach. In Mekton, any ship that is more than 2,200,000 metric tons is Mega-Heavy; almost all capital ships exceed this by a lot. The Zentraedi Nupetiet Vergnitzs-bis flagship itself is 270,000,000 tons, over 100 times as heavy as Mekton is used to dealing with. Again this leads to a lack of space for all the systems and needs of the ship to contain. See the notes on hull class conversion below.

Mekton Conversions for Mecha

Scale

All mecha with Overtechnology are basic Mekton scale. Mecha developed before the fall of the ASS-1 were built as Roadstriker-scale to represent the lack of Overtechnology systems, armor or weaponry.

MDC to Kills

Average of 1K per 25 MDC, round to nearest. This should be allotted 2:1 ratio of servo and armor. For instance, 250 MDC (a VF-1 torso) should give 9K, which should be 6K of servo and 3K of armor. Head servos were increased by one servo class to make

room for the sensors and head lasers. Although this still goes by the overrated MDC values, in Mekton it seems to balance out better.

General MDC to Kills conversion I used

In the case of arms and legs that have upper and lower section ratings, add the values together.

	Servo Class	Armor Class
Main Body		
150 MDC	Superlight 2K	Superlight 1K
175 MDC	Superlight 2K	Lightweight 2K
200 MDC	Lightweight 4K	Lightweight 2K
225 MDC	Lightweight 4K	Striker 3K
250 MDC	Striker 6K	Striker 3K
275 MDC	Striker 6K	Medium Striker 4K
300 MDC	Medium Striker 8K	Medium Striker 4K
325 MDC	Medium Striker 8K	Heavy Striker 5K
350 MDC	Heavy Striker 10K	Heavy Striker 5K
375 MDC	Heavy Striker 10K	Mediumweight 6K
400 MDC	Mediumweight 12K	Mediumweight 6K
425 MDC	Mediumweight 12K	Light Heavy 7K
450 MDC	Light Heavy 14K	Light Heavy 7K
475 MDC	Light Heavy 14K	Medium Heavy 8K
500 MDC	Medium Heavy 16K	Medium Heavy 8K
525 MDC	Medium Heavy 16K	Armored Heavy 9K
550 MDC	Armored Heavy 18K	Armored Heavy 9K
600 MDC	Super Heavy 20K	Super Heavy 10K
650 MDC	Super Heavy 20K	Super Heavy 10K
700 MDC	Mega Heavy 22K	Mega Heavy 11K
Arms		
75 MDC	Striker 4K	Lightweight 2K
100 MDC	Medium Striker 5K	Striker 3K
120 MDC	Medium Striker 5K	Medium Striker 4K
125 MDC	Medium Striker 5K	Heavy Striker 5K
150 MDC	Heavy Striker 6K	Heavy Striker 5K
175 MDC	Heavy Striker 6K	Mediumweight 6K
200 MDC	Mediumweight 7K	Mediumweight 6K
225 MDC	Mediumweight 7K	Light Heavy 7K
250 MDC	Light Heavy 8K	Light Heavy 7K
275 MDC	Medium Heavy 9K	Light Heavy 7K
300 MDC	Armored Heavy 10K	Medium Heavy 8K
Legs		
150 MDC	Striker 4K	Striker 3K
175 MDC	Medium Striker 5K	Striker 3K
200 MDC	Medium Striker 5K	Medium Striker 4K
225 MDC	Heavy Striker 6K	Medium Striker 4K
250 MDC	Heavy Striker 6K	Heavy Striker 5K
275 MDC	Mediumweight 7K	Heavy Striker 5K
300 MDC	Mediumweight 7K	Mediumweight 6K
325 MDC	Light Heavy 8K	Mediumweight 6K
350 MDC	Light Heavy 8K	Light Heavy 7K
375 MDC	Medium Heavy 9K	Light Heavy 7K
400 MDC	Medium Heavy 9K	Medium Heavy 8K

Wings

100 MDC	Lightweight 2K	Lightweight 2K
120-125 MDC	Lightweight 2K	Striker 3K
150-160 MDC	Striker 3K	Medium Striker 4K
175-180 MDC	Medium Striker 4K	Medium Striker 4K
190-200 MDC	Heavy Striker 5K	Medium Striker 4K
250+ MDC	Heavy Striker 5K	Heavy Striker 5K

Head

50-59 MDC	Lightweight 2K	Superlight 1K
60-69 MDC	Lightweight 2K	Lightweight 2K
70-79 MDC	Striker 3K	Lightweight 2K
80-89 MDC	Striker 3K	Striker 3K
90-100 MDC	Striker 3K	Medium Striker 4K
105-110 MDC	Medium Striker 4K	Medium Striker 4K
120+ MDC	Medium Striker 4K	Heavy Striker 5K

Physical PS Rating

PS 50 or less	Standard Hydraulics
PS 60	Heavy Hydraulics
PS 70+	Superheavy Hydraulics

Weapons

See more notes under Chapters 1 & 2 for already converted weapons.

Range – Convert range to meters and divide by 50 to get ranges in hexes, rounding to the nearest hex.

Damage –Ballistic weapons usually should not do more than 3K, but will have a burst value equal to the barrels of the weapon if it lists "burst" as a firing mode, although later models would get a faster firing rate as technology advances. Ammo was equal to the number of "full bursts" payload. Energy weapons would usually do 1K per dice rolled, with +1K for every +5 damage bonus. Missiles damage was converted by the average missile type damage; every 20 points of MDC it could inflict was 1K of damage. Individual weapons can be tweaked up or down to fit the information provided.

For example; the Tomahawk PBG-11 particle beam cannons do 5d10+25 mega-damage. Five dice of damage gives 5K, and the +25 (divided by five is five) gives +5K. Thus, the PBG-11 inflicts 10K of damage. Most head-mounted lasers do 1d4 or 2d4 MD, giving them damages of 1 or 2K.

Another example; the GU-11 gunpod is an early-OT designed ballistic weapon. It should only do 3K of damage per burst. Because it has three barrels, it gets a BV of 3. This means the gun *can* inflict as much as 9K per burst. The GU-15 carried by the VF-19 has six barrels and advanced ammunition, giving it a 3K damage rating and BV6 for a maximum of 18K damage per burst.

One more example; a micromissile usually does 1d6x10 MD. This is a maximum of 60 MD per missile. Divide this by 20 to get 3K damage per micromissile. Long-range missiles typically inflict 4d6x10 MD, for a maximum of 240 MD per missile. This gives a damage of 12K. LRMs usually also have a blast radius, giving them Blast 1 template.

Sensors & Communications

Ok this part got difficult because the many mecha would have beyond MgH class sensors but only STR class communications. For these I just took the class that was

roughly mid-point between the two. Optionally to convert others, take the class of communications and just use that for both.

Speed

For some conversions, the speed will be different than listed in Palladium. Conversions can either just find the appropriate MA based on the Palladium listed speed, or use the Mekton reverse-engineering formula to use the official stats given (where available).

The formula goes like this: Find the total thrust output (in kg) and divide by the total weight of the mecha (again in kg). This number is the amount of Gs of acceleration. Multiply the acceleration by eight to get the mecha's MA total. This is assumed to be the fighter mode's speed, so divide by two to get the battroid mode's MA. Since most variable fighters have a split powerplant/thruster package in both legs, divide this final value by half to find how many MA each leg thruster provides.

Unfortunately, this value will often conflict with the mecha's "official" speed listing.

For example, the VF-11B is listed with 28,000 kg thrust (x2) and weighs 9,000 kg. The total thrust is 56,000 kg. Divide this by the weight of 9,000 kg to get 6.2 G acceleration. Multiply the Gs by eight to get MA 49.6 (round to 50). The VF-11 has MA 50 in fighter mode, which is Mach 6.82. First subtract 2 MA (bonus from wings), then divide this by half for battroid to MA 24, then by half again to get 12 MA granted from each leg thruster.

The official mechanical stats list the VF-11B as having a speed of Mach 3.5 at 10 km to 30 km above sea level in fighter mode and Mach 8.2+ at 30km or higher. The closest MA to this is 37 (Mach 3.59) and MA 55 (Mach 8.31).

Pre-Overtechnology Weaponry

To determine the weight of a pre-OT weapon, figure the maximum Hits of damage it can do and divide by 2. This is how many Hits the weapon can take. Now divide this value by 5 to convert it to its Kills equivalent. Divide the Kills by 2 to get the tons. Divide the tons by 10 to scale down. Then multiply by 1,000 to convert to kg.

Mekton Conversions for Capital Ships

Space Efficiency

Space efficiency for capital ships costs 10 CP per 0.25 spaces shaved off. Crew, cargo, medical bays, repair bays and mecha hangers cannot usually be made space efficient (costs double). Furthermore, weapons that inflict over 500K of damage cannot be made space efficient either.

Extra Spaces

A capital ship can sacrifice 5K to gain an additional Space.

Weight Efficiency

Weight efficiency works different for capital ships. If a ship needs more room than it would have at a lower hull class, build the ship larger and then use weight efficiency at a multiplier of x0.1 per hull class reduced. Thus a Light Heavy ship that weighs as a Lightweight ship has a weight efficient modifier of x0.5. Spaces, CP, kills and turn are as per the original hull class. Capital ships do not use weight efficiency on individual components.

Hull Class	Kills	Spaces	CP	Mass/Tonnage	Turn
Superlight	200	2	1,000	150 to 2,399	+1
Lightweight	400	4	2,000	2,400 to 11,999	+2
Striker	600	6	3,000	12,000 to 39,999	+3
Medium Striker	800	8	4,000	40,000 to 94,999	+4
Heavy Striker	1000	10	5,000	95,000 to 199,999	+5
Mediumweight	1200	12	6,000	200,000 to 349,999	+6
Light Heavy	1400	14	7,000	350,000 to 499,999	+7
Medium Heavy	1600	16	8,000	500,000 to 999,999	+8
Armored Heavy	1800	18	9,000	1,000,000 to 1,499,999	+9
Superheavy	2000	20	10,000	1,500,000 to 2,199,999	+10
Mega Heavy	2200	22	11,000	2,200,000 to 3,000,000	+11
Mega Heavy Plus	+100*	+1*	+500*	+1,000,000 ton	+0

* Per million tons (or partial) over three million.

For example, the Nupetiet Vergnitz-Biz is 170,000,000 tons. This translates into 18,900 Kills, 189 Spaces, base hull cost of 94,500 CP

Armor

Capital ships may mount any class of armor to any hull class. Capital ship armor ablates only by 100K or stronger attacks, and loses 1d10 SP each time it ablates. This ablation represents large sections of exterior hull being blown off. Energy absorbing armor was never shown in Macross, although some Protoculture ships may have had it.

Armor Class	SP	CP
Superlight	10	500
Lightweight	20	1,000
Striker	30	1,500
Medium Striker	40	2,000
Heavy Striker	50	2,500
Mediumweight	60	3,000
Light Heavy	70	3,500
Medium Heavy	80	4,000
Armored	90	4,500
Heavy	100	5,000
Superheavy	110	5,500
MegaHeavy		

<u>Belted Armor</u>

Back during WWI and WWII, naval ships would layer armor to improve protection. Above the water line there was only a single layer of armor, but below the water line there was a "torpedo belt" which consisted of a light layer of armor designed to detonate torpedoes a small distance away from the main armor of the ship.

In Mekton this can apply to capital ships. Zentraedi capital ships have no shields but they can take a disgusting amount of damage before being crippled.

Any Mekton, Corvette or Starship (or Excessive) scale vehicle with a "native" form of a ship or building and no transformation abilities may use belted armor. The first layer of armor is purchased normally, and is the "main" armor and is the closest to the structure. Each layer over that costs x2.0 armor cost. Armor SP layers, but does not stack, and is listed in order of innermost armor to outermost armor. Only nuclear blast or mega-beam weapons of the same scale or larger can damage multiple layers of armor at once.

How it works is this; say a capital ship has three layers of armor, the innermost layer is SP 100 ablative armor, the middle is SP 70 normal, and the outermost is SP 70 normal. The armor would be written as 100ab/70/50. The outer layer must be blown off before the mid layer can be hit, and that must be blown off before the inner layer can be hit.

Weapon Systems

Most capital ships typically have a heavy particle cannon and/or 1-2 heavy laser cannons for main attack. They also typically have several medium or light lasers for attacking smaller ships and larger mecha. Most also have numerous (100+) small lasers and missile launchers to ward off mecha and missiles.

Unlimited payload on a ballistic/missile weapon indicates a weapon does have a finite payload, but the payload is so large that it will take a prolonged campaign to deplete.

Weapon Arcs:

FF – Forward Firing, only in the direction of the ship
F – Forward Arc, 180 degrees forward
R – Rear Arc, 180 degrees rear
A – All, can fire any direction or weapons are all over the hull
B – Bottom, mounted on the bottom
T – Top, mounted on the top
S – Side, can fire in any direction on the appropriate side of the ship

Missiles are usually listed as Forward Arc weapons, although if there is sufficient room for turning, missiles have an All Arc range.

<u>Planetary Scale Converging Beam Cannon</u>

This weapon is similar to the heavy particle beam cannons built into many Zentraedi warships, except that it is designed primarily for use against planets and satellite factories. The weapon takes up a horrendous amount of energy and requires a long time to charge up (approximately 12 days to recharge the capacitors).
Damage: 500,000K
Kills: 5000
WA: +3 Range: 6,437,376(321,868.8 km)
Firing Arc: FF
Space: 100 Cost: 1,250,000 CP
Notes: Wide Beam (330 hex), Ultra-Beam, Warm-up (12 days)

If fired against a planet, this weapon will leave a radioactive crater 10,000 km in diameter and 10-20 km deep.

Main Particle Beam Cannon

This is the main cannon on most of the larger capital ships. It sucks up a lot of power, so it can only be fired once every 20 rounds (5 minutes). The beam lasts for a full round, and hits everything in its path, typically ripping even large capital ships in half. While this isn't as powerful as the Palladium version (no automatic kill), this kind of damage to even a capital ship will cause it to collapse. This weapon is considered to have a clip of five shots per hour because of the enormous energy drain on the ship's powerplant.
Damage: 5000K
Kills: 2000
WA: +3 Range: 6,437,376(321,868.8 km)
Firing Arc: FF
Space: 10 Cost: 250,000 CP
Notes: Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 5

If fired against a planet, this weapon will leave a radioactive crater 100 km in diameter and 1-2 km deep.
Palladium Equivalent: Heavy Particle Beam Cannon or Electromagnetic Fusion Cannon

Bombardment Particle Beam Cannon

This is similar to the main particle beam cannon, with the only difference being a shorter range and it is usually mounted on a large turret to allow a wider firing arc. It is only found on the Varauta fleet flagship.
Damage: 5000K
Kills: 2000
WA: +3 Range: 804,672 (40,233.6 km)
Firing Arc: F
Space: 10 Cost: 200,000 CP
Notes: Wide Beam (33 hex), Ultra-Beam, Warm-up 3, Clip 5

If fired against a planet, this weapon will leave a radioactive crater 100 km in diameter and 1-2 km deep.

Superheavy Laser Cannon

The super-heavy laser cannon is mounted on most capital ships, either in place of the particle beam cannon or to back up its already tremendous firepower. Most capital ships will not have more than a couple of these mounted.
Damage: 500K
Kills: 500
WA: +1 Range: 6,437,376(321,868.8 km)
Firing Arc: FF typically, occasionally F
Space: 5 Cost: 17,385 CP
Notes: Warm Up 1
Palladium Equivalent: Main Laser Cannon (1d8x1000 or 1d6x1000 MD)

Heavy Laser Cannon

This is the standard weapon for most of the smaller capital ships. Many larger capital ships have a few of these mounted for extra firepower while their main cannons recharge.

Damage: 200K
Kills: 200
WA: +1 Range: 6,437,376(321,868.8 km)
Firing Arc: F/R or sometimes All
Space: 3 Cost: 15,050 CP
Notes:
Palladium Equivalent: Retractable Laser Turret (1d4x1000 MD)

Medium Laser Cannon

This is a medium class laser that provides fair offensive power against capital ships.

Damage: 100K
Kills: 100
WA: +1 Range: 250,000 (12,500 km)
Firing Arc: F or R
Space: 1 Cost: 8200 CP
Notes:
Palladium Equivalent: Secondary Particle Cannon (1d6x500, 3d4x100, 2d4x100 or 2d6x100 MD)

Light Laser or Particle Beam Cannon

These light weapons are mounted on capital ships in large groups, typically to help fight off mecha that come too close, although they can still hurt capital ships by their sheer numbers. This is also the common weapon mounted on smaller capital ships such as scout ships.

Damage: 50K
Kills: 50
WA: +1 Range: 123,597 (6,179.9 km)
Firing Arc: F or R, sometime A if there are enough
Space: 0.25 Cost: 1383 CP
Notes:
Palladium Equivalent: Forward Light Lasers or Beam Cannon (1d4x100 MD), also Particle Beam (1d6x100)

Rapid Fire Laser

Lightweight weapon mount on smaller capital ships or shuttles.

Damage: 10K
Kills: 10
WA: +1 Range: 24
Firing Arc: F or A
Space: 0.25 Cost: 50
Notes: BV 3

Palladium Equivalent: Rapid Fire Laser (1d6x30, 4d6x10, 3d6x10, 1d4x30, 3d4x10 MD)

Rail Cannon

This is the high-speed 178 cm electromagnetic rail cannon mounted on the "shoulders" of the SDF-1. They were later replaced with energy weapons, and were only used on this one capital ship (and later SDF class ships).
Damage: 120K
Kills: 120
WA: +1 Range: 6,437,376 (321,868.8 km)
Firing Arc: All (has a 180 degree rotation with a 90 degree elevation).
Space: 1 Cost: 12,068 CP
Notes: 100 shots take 1 Space and have 25K, AP
Palladium Equivalent: Reflex Electromagnetic Rail Cannon (3d4x100 MD)

Tri-Barrel Rail Gun

This is a specialized weapon only mounted on Galaxy Patrol vessels. It packs less punch than the 178cm units mounted on the Macross, but their rapid firing ability allows them to do nearly as much damage.
Damage: 40K
Kills: 40
WA: +1 Range: 3,200,000 (160,000 km)
Firing Arc: All (has a 180 degree rotation with a 45 degree elevation).
Space: 1 Cost: 9,500 CP
Notes: BV3, 100 bursts take 1 Space and have 25K, AP
Palladium Equivalent: Retractable tri-barrel rail gun (3d6x100 MD)

20mm Vulcan Phalanx

This is a relatively lightweight weapon compared to other capital ship class weapons, and is only found on the Daedelus. This version is an OT upgraded variant of those found on pre-OT vessels. It uses AP rounds similar to those found in variable fighter gunpods.
Damage: 1K
Kills: 5 (includes targeting system)
WA: +2 Range: 32 (1.6 km)
Firing Arc: All
Space: 0.5 Cost: 27 CP
Notes: BV 5, Anti-Missile
Notes: 50 bursts of ammo is 33 CP, 13K and 1 Space

Missile Launcher

Capital ships often have large capacity missile launchers mounted in strategic places on their hull. These are typically used for anti-mecha or countermissile purposes, and will fire large salvos of mecha-scale missiles. Each launcher will fire up to 30 intermediate-range or 15 long-range missiles per volley. Unless specified in the individual vessel's description, they are considered to have an effectively unlimited payload since most capital ships can carry several hundred salvos.

Damage: 7K or 12K
Kills: 50
WA: +1 Range: 1200 or 127^2 (60 or 860.5 km)
Firing Arc: All
Space: 0.25 Cost: 1000 CP
Notes:
Palladium Equivalent: Retractable Missile Turret (fires IRM or LRM)

Torpedo Tube

This is a torpedo tube that fires one torpedo at a time in a forward firing arc. These torpedoes are a mid-point between LRMs and ICBMs.
Damage: 50K
Kills: 30
WA: +2 Range: 123,597(6,179.9 km)
Firing Arc: FF
Space: 0.25 Cost: 1450 CP
Notes: Each torpedo takes 8K to destroy. Blast 5.

Strike Missile Launcher

Some capital ships are armed with large ICBM style torpedo tubes that fire anti-warship missiles that are roughly the size of a variable fighter. Each tube can fire one such missile, and then takes a couple rounds for the auto-loader to load another missile.
Damage: 700K
Kills: 90
WA: +2 Range: 6,437,376 (321,868.8 km)
Firing Arc: F
Space: 3 Cost: 17,800 CP
Notes: Each missile takes 25K to destroy. Blast 15, Warm up 2

Decuple Missile Launcher

This missile launcher is mounted on light capital ships and corvette-scale vessels, and is essentially a smaller version of the standard capital ship. They typically fire in volleys of even numbers of missiles.
Damage: 12K
Kills: 15
WA: +1 Range: 127^2 (860.5 km)
Firing Arc: All
Space: 0.25 Cost: 100 CP + missile payload
Notes: Add 30.6 CP per LRM carried

Multi-munition Missile Launcher

This missile launcher is mounted on smaller ships, and is designed to be able to load different missiles from internal bays to allow it greater versatility in combat.
Kills: 25
Firing Arc: All
Space: 0.25 Cost: 400 CP

Notes: Multi-Feed
Super Sea Sparrow Missile: +1 WA, 20d10 Hits, Blast 50m, Range 70 km
AGM-84 Harpoon Missile: +2 WA, 30d10 Hits, AP, Long Range, Range 110 km

Falcon Sprint Missile Rack

These are old-style missile racks like those used on various pre-Overtechnology naval vessels. Each rack holds ten missiles, which must be manually reloaded by the crew and takes approximately ten minutes.

The Falcon missile uses a sub-kiloton nuclear warhead. Each missile is 2.14m long, 29cm in diameter, 92.1 kg and has a range of 9.6 km at Mach 2.1. The W54 nuclear warhead has a variable yield of 10T to 250T. At 10T it can level a two city block area.
Damage: *
Kills: 15
WA: +2 Range: 192 (9.6 km)
Firing Arc: All
Space: 0.25 Cost: 50 CP per launcher, +2.5 CP per missile
Notes: Nuclear, Blast 8, EMP
* 20d10 Hits and Blast 50m at 10T; 30d10 Hits and Blast 100m at 50T; 40d10 Hits and Blast 150m at 100T, 50d10 Hits and Blast 250m at 150T; 60d10 Hits and Blast 300m at 200T; 70d10 hits and Blast 400m at 250T

Close In Defense System (CIDS)

This is used to represent the huge amount of smaller lasers mounted on capital ships. These are used primarily to repel enemy mecha and missiles that come too close to the ship. Most capital ships mount the standard version, although the larger ships mount a heavier version. Most traditional Zentraedi ships do not have a CIDS, relying on their thousands of mecha for point defense.
Damage: 5K or 10K
WA: +1 Range: 24 or 36 (1200m or 1800m)
Firing Arc: All
Space: 0.5 or 1 Cost: 172 or 868CP
Notes: Mecha are hit by 1 laser for every number that the hit roll exceeds their dodge roll.
Palladium Equivalent: any laser doing 1d6x10 MD or less

Subassemblies

Capital ships are assumed to have basic systems such as life support and gravity decks, which are included in the cost of the basic structure.

Anti-Gravity Drive – Sometimes it is also called a contragrav drive, this is used for VTOL style takeoff and landing on planets at a rate of 400m per minute. Only the smallest vessels do not use this system. In Mekton, an anti-gravity drive takes 1 space, has 20 Kills and costs 250CP per Hull class.

Pinpoint Barrier System

This defensive system is installed in all UN Spacy craft, although the traditional Zentraedi fleets do not use them.

Each PPB system creates 4 shields that can be moved around the ship to block attacks. Operators in the ship's bridge control the barriers. These operators are instructed to defend (1) the command tower, bridge, and sensor array, (2) main engines, (3) hangar bays, and (4) weapon systems, in that order.

Light PPB are usually mounted on light escort and scout vessels, as well as many civilian transports to protect against raiders. Medium PPB are the standard for most UN Space Navy vessels. Heavy PPB are reserved for colony super-scale ships and the New Macross Class carriers that have sufficient powerplants to operate them.

The pinpoint barrier system shields can stop their allotment of damage each round, although every Kill of damage they block reduces the amount of SP they provide. Thus a light PPB shield can stop 500K per round, and if it is hit for 200 damage, its SP is reduced to 300. PPB shields regenerate 10% of their full SP at the start of each round, and takes 1 full round to power up the PPB system.

Light PPB – 500SP each, Regenerate 50/round, 2 spaces, 3250 CP
Medium PPB – 1,000SP each, Regenerate 100/round, 4 spaces, 6500 CP
Heavy PPB – 2,000SP each, Regenerate 200/round, 6 spaces, 10,250 CP

Omni-directional Barrier

This is a more powerful version of the PPB, from which the PPB was developed on board the SDF-1 Macross. The ODB extends out 100m around the ship and blocks all incoming attacks. While the barrier is up, the ship cannot fire any energy weapons due to the power requirements of the system. Also, any ballistic or missile weapons will be blocked inside the barrier. The barrier itself has 10,000SP that renews at a rate of 2500SP per round. The system costs 25,000 CP and takes up 10 spaces. It is only available to early Protoculture ships. Unlike the PPB system, this barrier will not become fused from deflecting a heavy particle beam unless the SP is reduced to zero or below (treat it as a heavy PPB for repair time); if the ODB still has SP left after the blast, it remains active.

The only *known* vessel to mount such a system at current is the Varauta Super-size Fleet Command ship that was abandoned by Gepernitch at the end of the Varauta/M7 war (which is now being analyzed by OTEC). The SDF-1 originally had such a system, so it may have been standard on all Inspection Army vessels. Later vessels may or may not have access to this.

In Macross Frontier, the Macross Quarter appears to have an omnidirectional barrier that conforms to the hull's shape.

Storage

Each capital ship must purchase at least 1 space worth of Crew. Each space dedicated to Crew, Mecha or Cargo grants a specified amount according to the ship's hull class. Mecha bays also include repair facilities to repair up to 3 mecha at a time. A space dedicated to crew can be either crew's quarters, or stasis pods for Zentraedi ships.

A dedicated repair bay has the facilities to work on as many mecha as a mecha hanger would be able to store at the same hull class. Medical bays can treat as many patients at once as listed for a crew/passengers space allotment.

I did not make any distinctions between micron and macron scale bays. A Striker-size crew allotment will hold 900 microns or macrons depending on the origin of the vessel in question.

Hull Class	Mecha Bay	Cargo	Crew/Passengers
Superlight	1	5 tons	100
Lightweight	5	25 tons	400
Striker	10	500 tons	900
M. Striker	15	800 tons	1600
H. Striker	25	1250 tons	2500
M. Weight	35	1800 tons	3600
L. Heavy	50	2450 tons	4900
M. Heavy	65	3200 tons	6400
A. Heavy	80	4050 tons	8100
S. Heavy	100	5000 tons	10,000
Mg. Heavy	120	6050 tons	12,100

Mecha Bay: 1000 CP
Cargo or Crew: 500 CP
Repair Bay: 1300 CP
Medical Bay: 750 CP

Sensors & Communications

The sensors and communications packages are tricky to import to Mekton since the capital ships will usually have their ranges fall into one class for sensor range, and another class for communications range. For this, the communications and sensors should be purchased individually. Each takes up 0.5 space and are usually mounted together.

Some sensor packages also include subspace mass detectors that will detect objects of at least 60,000 kg (won't detect most mecha) up to 1AU (149,504,094.92 km) away. This is fairly crude, and is unable to tell anything other than approximate mass. This takes 1 space and costs 250 CP. This is used primarily to avoid collision during space fold.

Some communications packages also include hyperspace communications relay via the Galaxy Network. This can transmit communications up to any distance at a speed of 4000 light years per second. The system has a range of up to 1 AU (149,504,094.92 km) distant from the ship. This is used only for communicating with other fleets or bases far outside the normal range. This takes 1 space and costs 300 CP.

The listing below is for starship scale capital ships. Divide all values by 10 for corvette scale ships, and multiply by 10 for excessive scale. Standard UN Spacy packages appear to be SL class communications (3000 km, 1440 km listed) with AH class sensors (3200 km), although some non-combat colony ships only mount STR class sensors (320 km). Early UN ships typically have MW class communications and sensors.

Class	CP	Kills	Sensors	Communications
Superlight	50	50	100 km	3,000 km
Lightweight	100	100	200 km	5,000 km

Striker	200	100	400 km	8,000 km
M. Striker	400	100	700 km	10,000 km
H. Striker	600	200	1100 km	13,000 km
M. Weight	900	200	1500 km	15,000 km
L. Heavy	1200	200	2000 km	18,000 km
M. Heavy	1600	300	2600 km	23,000 km
A. Heavy	2200	300	3000 km	30,000 km
S. Heavy	2700	300	4000 km	50,000 km
Mg. Heavy	3200	400	5000 km	100,000 km
Backup	200	200	100 km	3,000 km

Multipliers

Listed here are some capital ship specific systems. Capital ships can use multipliers from Mekton Zeta Plus, such as stealth or transformation, as normal.

Engines

This is the ship's main propulsion system, regardless of whether it is thrusters, gravitics or whatever. All engines take 1 space. Having MA 0 indicates a station rather than a ship. Typically a capital ship will not need MA 109 (escape velocity) due to their powerful engines and possible contragrav drives. Capital ships are assumed to have transatmospheric capability and sublight drives without having to purchase the systems, although most capital ships are not designed to be able to land on anything other than water.

Day move assumes a full 24 hours of travel (for less time used, multiply the hours moved by the kph). No capital ships in Macross have higher than MA 50, but these are listed as speed references

MA	Cost	Day Move	kph	Mach
0	x-0.2	0 km	0	
8	x-0.1	3,456 km	144	
10	x0.0	4,320 km	180	
12	x0.1	7,258 km	302	
14	x0.2	10,886 km	454	
16	x0.3	15,206 km	634	
18	x0.4	20,218 km	842	
20	x0.5	25,920 km	1,080	
22	x0.6	32,304 km	1,346	Mach 1
28	x0.8	51,456 km	2,138	Mach 2
34	x1.1	85,200 km	3,550	Mach 3
40	x1.7	102,912 km	5,040	Mach 4
44	x2.3	148,176 km	6,177	Mach 5
48	x2.9	177,881 km	7,340	Mach 6
50	x3.5	207,432 km	8,100	Mach 7
54	x4.5	228,600 km	9,525	Mach 8
109	x10	979,430 km	40,809	Escape Velocity

Hyperdrive

This includes space fold, hyperspace travel and most other super-luminal flight capabilities. The multiplier is always x1.0, although the tech level determines the speed.

All vessels based on Protoculture technology (which includes all UN Spacy, Zentraedi and Varauta vessels) are TL 10 although they only move 1 LY per 6 minutes. Other groups, such as smugglers and civilians, may have lower technology. A space fold generator designed with materials from the Galactic Whales (see Sourcebook 3) are more efficient and only have a multiplier of x0.8 (which is illegal by UNG standards).
TL 6 1 LY per year
TL 7 1 LY per week
TL 8 1 LY per day
TL 9 1 LY per hour
TL 10 1 LY per minute

Crew Quality

This rating determines how good the crew is. A young and highly trained crew can be just as good as a veteran crew that lacked proper training.
D-Grade (x0.0) – Unseasoned, untested and inexperienced. Skill Rolls: 8+1d10
C-Grade (x0.2) – Minor experience, maybe 1-2 fights. Skill Rolls: 12+1d10
B-Grade (x0.6) – Experienced and competent. Skill Rolls: 14+1d10
A-Grade (x1.0) – Seasoned and extremely skilled. Skill Rolls: 16+1d10
S-Grade (x1.4) – Veteran and undaunted. Skill Rolls: 18+1d10

Average UN Spacy and Meltran crews are "A" grade; average Zentraedi and Anti-UN crews are "B" grade; average Varauta crews are "C" grade (the brainwashing dulls their instincts in battle). "S" grade only applies to certain veteran special forces units.

Specific Conversion Notes

This is a compilation of notes pertaining to various mecha and ships, and offers explanation as to why a particular piece of technology got converted the way it did.

General Notes

Advanced VFs got alpha armor to represent the sheer pounding they survive in the anime. Includes VF-17, VF-171, VF-19, VF-22, VF-25, VF-27, YF-29, VAB-2, and VB-6.

VF-19 Series

VF-19S has more powerful engine output, but they didn't increase MA; so the S model got +2 MA (+1 per engine) just to make it slightly faster than the A and F models.

Sound Force Units

All "Kai" Sound Force units get Beta armor. In the anime they all take a severe beating several times without losing limbs (except when Mylene's VF-11MAXL Kai was crunched by Glavil on two different occasions, but he's the size of a mountain).

Palladium to Interlock

INT	IQ/30 x10	(example, IQ 15 divided by 30 is 0.5, times 10 is INT 5)
COOL	ME/30 x10	

PRE	MA/30 x10	PRE and EMP may be adjusted so that MA/30 x10 is the average
EMP	MA/30 x10	
REF	PP/30 x10	
DEX	PP/30x10	DEX/REF may be adjusted so that PP/30x10 is the average
TECH	{(MA x0.25) + (IQ x 0.75) /30} x10	
STR	PS/30 x10	
BOD	PE/30 x10	
ATTR	PB/30 x10	
MA	(Speed x2) /6	
Skills	Skill percent /10 (round to nearest)	

Hit Points, Level, Experience, SDC and MDC are not used and are dropped. All secondary stats are figured as normal.

Hand to Hand combat translates as follows: Basic becomes Brawling, Expert becomes Hand to Hand, Martial Arts and Assassin become Martial Arts. Weapon Proficiencies should be converted to the closest weapon skill.

Skills should be figured by the *base* skill level at level one, exclude all IQ/OCC bonuses. For every level of experience, grant 15 levels of skills to distribute.

Quick Values (Stat/30 x10):

2-4	1
5-7	2
8-10	3
11-13	4
14-16	5
17-19	6
20-22	7
23-25	8
26-28	9
29-31	10

Chapter 14 – Glossary

This chapter covers terms used for both Macross and Mekton.

AFOS – Codename for the extraterrestrial entity discovered by a deep-sea marine probe group near Mayan Island in 2008. It was discovered after PCS readings remarkably similar to ASS-1's were observed using Cyclops radar. The exact age of the entity is classified a B-1 confidential matter, but as a result of analysis, it can be conjectured to be over several tens of thousands of years old. Late in 2008, the artifact activates and attempts to wipe out all life on earth, but is stopped by the efforts of a lone VF-0 pilot. It was apparently designed by the Protoculture to resemble a Vajra queen.

BV (Burst Value) – This indicates that the weapon fires a burst of multiple rounds. For each number over the number needed to strike the target that the roll is made, the target suffers an additional hit from the weapon at the base damage, up to the BV value. Thus with a BV4 weapon, if the player needs a 15 to hit an opponent and rolls a

total of 17, not only does he hit with the primary round, but also hits with an additional 2 rounds [for 16 and 17]. (See Combat in the basebook.)

Command Armor – This is parts of additional armor that can be attached to a mecha to provide temporary armor, weapons and other systems. Command armor is usually designed to be jettisoned if damaged or exhausted of ammunition. FAST packs that mount on a VF's arms/legs are considered command armor, although dorsal mounted ones are not. The GBP "full armor" is a heavy type of command armor.

CP (Construction Points) – This is the basic unit used in Mekton to indicate relative cost of a particular mecha, ship or piece of equipment. Each CP comes out to roughly 10,000 credits. The CP is listed for mecha, vehicles and other equipment because it was a better representation of value for some items over the use of a monetary value. For instance, a tractor might cost a lot of credits but is relatively worthless to most characters; so listing it with a CP makes its cash value more ambiguous.

Example: The VF-1 costs 378 CP giving it a price tag of about 3,780,000 credits while the VF-22S is 4070 CP and costs around 40,700,000 credits.

Cyclops – Cross dimension radar developed with Overtechnology which can detect PCS readings. This allows the sensors to pick up Protoculture technology, including the Protodeviln/Evil series.

FAST Pack (Fuel And Sensor Tactical Pack) – These are externally mounted packs with extra sensors, ammunition, fuel or weapons that mount on VF units to give them more range or firepower. There are dorsal/back mounted units, ventral/arm mounted units and leg mounted units.

GBP (Ground Battle Protector) – This is a set of command armor that protects the forearms, chest, lower legs and shoulders of the VF as well as providing forearm shields and extra boosters to offset the bulk. The GPB system also packs in a large supply of missiles and other optional weapons, giving a VF the armor and firepower of a Destroid. The VF cannot transform out of battroid form while wearing a GPB system. Developed by Shinnakasu Heavy Industry.

The GBP is also referred to as "reactive armor" or "full armor". This is a type of command armor (see above).

Protoculture – This was the first sentient humanoid race in the Milky Way galaxy. They created highly advanced technology in mechanics and genetics, creating the basis of most of the UN Spacy technology as well as the Zentraedi Series clones and the Protodeviln. They altered the genetic structure of early humanity for the purpose of future colonization. They also had a hand in altering other humanoid life such as the Zolans. The Protoculture had discovered the Vajra millennia ago and virtually worshipped them, making some of their EVIL series to look like the Vajra Queen and to duplicate their space fold abilities.

Reaction Weapon – System which diverts the enormous energy produced by Overtechnology-based thermonuclear reaction for use as a weapon. Protoculture had also formerly used similar systems, but because Protoculture stopped their use and production in the distant past, they are known as the "long-lost weaponry" among the Zentraedi. By 2045, the term reaction weapon is used to refer to weapons employing pair-annihilation reaction by Overtechnology. Like the strict controls exerted on twentieth-century nuclear weaponry, permission by the highest authorities is necessary for their use. Reaction weapons include the RMS series and Planet Buster missiles. The UN charter has a ban on their use, which may be lifted with permission from UN high command or by use in "exceptional circumstances".

The intentionally vague "reaction" concept was used as an euphemism to avoid mentioning the words "nuclear weaponry" on-screen. According to Kawamori Shoji, the use of nuclear weaponry by the "good guys" was considered taboo by Japanese television stations. (It was not considered "taboo" to use "thermonuclear" in the context of power systems and engines.) When it was noted to him that pair-annihilation reaction ("currently" being used in the Macross universe) is even more destructive than thermonuclear reaction, Kawamori observed that since pair-annihilation weapons don't exist (yet), there are no protestors. This lends to the idea that these are not nuclear but rather anti-matter weapons.

Thermonuclear Reaction – A type of Overtechnology similar to nuclear fusion. Unlike nuclear fusion however, this energy reaction became an excellent power source of extreme efficiency, since the fuel does not necessarily have to be nuclear material and is also easily maintained in plasma state with the use of super dimension spatial theory. Furthermore, there is virtually no radiation given off by this process, making it safer; especially in the instance of an engine hit.

See notes under Reaction Weapon about the terminology choice and background.

Vajra – A race of biomechanical aliens that live near the galactic core. They are ancient, and predate the Protoculture, as they migrate to mate with swarms from other galaxies every "hundreds of millions of years". They were the inspiration of the Protoculture, and many of their developments were done to mimic the Vajra.

Macross Missile Massacre – Macross has a longstanding tradition of firing huge swarms of missiles in a single salvo, even against the most petty of enemy targets; particularly while using battroid armor sets that have 40 or more missiles.

Beam Spam – This is when *all* of the capital ships in a fleet fire *all* of their beam weapons at once to a spectacular effect.

Basic Abbreviations

AAM
: Air-to-Air Missile

AD
: Air Defense

ADR
: Air Defense Robot

AHEAD
: Advanced High Explosive Armor Defeating

AI
: Artificial Intelligence

AIF
: Artificial Intelligence Fighter

AP
: Armor Piercing (also AD or Armor Defeating)

APC
: Armored Personnel Carrier

APSSDS
: Armor Piercing Spin Stabilized Discarding Sabot

ASM
: Air-to-Surface Missile

ASS
: Alien Star Ship

AVF

Advanced Variable Fighter

AWM
: Air-to-Water Missile (torpedo)

BDI
: Brain Direct Image system

BDS
: Brain Direct-interface System

CAG
: Commander of Air Group
Combat Air Group

CCV
: Control-Configurable Vehicle – an airplane shaped with mass distributed as to have maximum maneuverability

CMV
: Counter-Missile Variable

Cycle
: Zentraedi unit of time approximately equal to one Terran year

ECCM
: Electronic Counter-Counter-Measure

ECM
: Electronic Counter-Measure

ERC
: Electromagnetic Rail Cannon

ET
: Earth Trekker

EGU
: Energy Gun Unit

FCS
: Fire Control System

G
: gravity
acceleration of gravity on the surface of Earth (9.81 m/s/s)

GERWALK
: Ground Effective Reinforcement of Winged Armament with Locomotive Knee-joint

GBP
: Ground Battle Protector system

GGV
: Giga-volt

GU
: Gun Unit (sometimes GPU or Gun Pod Unit)

HBR
: Heavy Battle Robot

HE
: High Explosive

HEAP

High Explosive Armor Piercing

HESH
: High Explosive Squash Head

HMM
: High-Maneuverability Missile

HOTAS
: Hands On Throttle And Stick

HUD
: Heads-Up Display

HW
: Heavy Weaponry

HWR
: Heavy Weaponry Robot
: Heavy Weight Robot

IFF
: Identification – Friend or Foe

IFV
: Infantry Fighting Vehicle (heavier armor and weapons, anti-infantry)

IRM
: Intermediate-Range Missile (sometimes MRM or Medium Range Missile)

L
: Lagrange

LDR
: Long-range Defense Robot

LRM
: Long-Range Missile

LST
: Landing Ship Tank

MB
: Main Battle

MBR
: Main Battle Robot

MBS
: Macross Broadcasting System
: Mainichi Houzou, Mainichi (Daily) Broadcasting Station

MG
: Machine Gun

MM
: Micro-Missile

MOAB
: Massive Ordinance Air Blast
: Mother Of All Bombs

MW
: Megawatt

NUNS
: New United Nations Spacy; alternate name for UN Spacy

OSSSF
: Outer Space Special Science Force

OT
: OverTechnology

OTEC
: OverTEChnology research group

OTM
: OverTechnology of Macross

PBS
: Pin-point Barrier System

PC
: Protoculture Calendar

PCS
: Proto-Culture System

PPB
: Pin-Point Barrier (sometimes PPV)

QF
: Drone Fighter

RCS
: Roll Control System

S/L
: Sea Level

SD
: Space Defense

SDF
: Super Dimension Fortress
: Self-Defense Force

SDR
: Space Defense Robot

SMS
: Strategic Military Service; private military provider service

SRM
: Short-Range Missile

T-O
: Take-Off

TACAN
: TACtical Air Navigation

term
: Zentraedi unit of time approximately equal to five Terran years

UHF
: Ultra High Frequency

UN
: United Nations

UNAF
: United Nations Air Force

UNG

United Nations Government (New Unity Government)

UNN

United Nations Navy

UNS

United Nations Spacy

UNSAF

United Nations Space Air Force

UNSM

United Nations Space Marines

UNSN

United Nations Space Navy

VA

Variable Attack craft

VB

Variable Bomber craft

VE

Variable Electronic-warfare craft

VF

Variable Fighter

VF-X

Variable Fighter-Developmental

VG

Variable Geometry

VHF

Very High Frequency

VT

Variable Trainer

VTOL

Vertical Take-Off and Landing

X

eXperimental craft (such as VF-X-3)

Y

prototype craft (such as YF-21)

Chapter 15 – Building the Better Beast

Ok, one of the players has an engineer with 10 ranks of Mecha Design and wants to modify or create new mecha. How do you go about this?

Step One

First off, figure out what the player wants to make, then determine if it will be easier to modify an existing mecha or build a new one from scratch. Once this is determined, go ahead and let the player make up the mecha's profile as normal (the GM has final say what is allowed).

Step Two

Now that the player and GM are satisfied with the design, the character has to make up the schematics for the beast. The character must spend 1 full day for every 25 CP or fraction thereof the mecha costs working on the schematics. At the end of this time, he makes an INT + Mecha Design + 1d10 roll with a difficulty equal to the square root of the mecha's cost (before scaling). For those of us without scientific calculators:

Mecha Cost	Difficulty
1.100	10
101-225	15
226-400	20
401-625	25
626-900	30
901-1225	35
1226-1600	40
1601-2025	45
2026-2500	50
2500 or more	55

If the roll fails, the character must spend another day revising the design and makes another roll. This continues until the character succeeds. Thus, a 780 CP mecha would take 32 days (31.2 rounded up) to design.

Most players at this point will say "holy sh#t" how can I make that when the best roll I can possibly make is 45 (INT 10 + Mecha Design 10 + Genius (Mecha Design) 5 + roll 10+10 with exploding die)? The answer is simple: get help. When multiple engineers work on a design, take the highest INT score, add the total value of each participant's Mecha Design skill, and roll 1d10. This makes it far easier for a character to develop mecha over 625 points.

For example, one engineer might work on the powerplant and thrusters while another will work on the fuselage.

Step Three

Once a working design is created, the blueprints go on to the mecha bay or Three Star Mobile Manufacturing Platform. This is where the Mecha Tech skill comes in.

Every mecha will have most or all of the following systems: Hydraulics, Armor, Powerplant, Sensors, Weapons and Movement Systems. For each system present, the engineer must make an TECH + Mecha Tech + 1d10 roll, with the same difficulty for designing the beast. Unlike with design, failing a Mecha Tech roll here is not immediately obvious (the GM can roll secretly if he wishes). For each roll that fails, and by how much, consult the following tables:

Fail by	Weapons	Sensors	Powerplant
15+	All beam weapons lose 2K	Sensors cut out after 1d6 rounds	Overheat: mecha shuts down after 1d10 rounds
10	All BV weapons jam after 1d6 bursts	Flawed array: ½ range for weapons	Bad power transmission: -1 MV
6	All beam weapons overheat after 1d6 shots	Targeting misaligned: -3 WA ranged	False "critical overheat" alarm after 1d6 rounds
3	All missiles jam after 1d6 uses	Bad shielding: get random Galaxy Network broadcasts for 1d10 rounds	Engine underpowered: Land MA drops 1d3 after 1d6 rounds

1	Faulty guidance: -4 WA for missiles	Sensors cut out for 1 round after 1d6 rounds	Overheating increases explosion save by 1

Fail by	**Armor**	**Movement System**	**Hydraulics & Frame**
15+	Cheap armor: ½ SP all servos	Movement cuts out after 1d10 rounds	Too much pressure: immobilized in 1d10 rounds
10	Armor placed wrong: -1 SP on 2 servos	System sluggish: ½ MA	Cracked pump: lose use of 2 servos after 1d6 rounds
6	Armor fitted wrong: -1 SP on 1 servo	Throttle jammed: move at ½ MA or no movement	Leak: lose use of 1 servo after 1d6 rounds
3	Refractive coating is bad: -2 SP vs. beam	Directional system stuck: +1 Turn radius	Hydraulic fluid is burning and fills the cockpit with smoke: -2 all rolls
1	Inconsistent density: -2 SP vs. missile or projectile	Movement system misaligned: -1 MA	Low pressure: -2K all melee attacks

Once a problem is identified, the character can re-roll to fix the problem. Keep using this chart until the problem is fixed. Yes, it's possible to make a minor fault much worse.

How long is this going to take?

It takes about 4 days per 50 CP or fraction thereof to build the prototype unit, not including any additional time needed to work out all the bugs (see above). Once the prototype is 100% functional, any further units take half the normal time. A standardized assembly line cuts it down to 1 day per 50 CP, although the advanced automated factories used by the UN military can cut this down even further once the machinery is setup for the new design.

How much is this going to cost?

Engineers working for a major mecha manufacturer such as Shinsei Heavy Industries or General Galaxy don't pay anything since they are doing their job! In the instance that someone wants to build a mecha for personal use or to get their own mecha company off the ground, 1 CP is roughly 100,000 credits. For example: the VF-1A is 234 CP, which costs 23,400,000 credits; while the VF-22S is 2213 CP, for 221,300,000 credits (not including gunpods, ammunition and missiles). Better pray for rich investors.

Big Science

Ok let's say your aspiring Chris J. Takatoku can't quite make a whole mecha just yet, but still wants to get his foot in the door of some big company to take care of expenses. What can he do?

Improvement [20 RP]

Improvement is the easiest part of mecha designing. Improvements are any alteration to an existing mecha or system that do not change the weight, range, efficiency or effect by more than 10%.

Example: The techie wants to improve the GU-11 gunpod by increasing the ammunition payload and range by 10%. This counts as two separate Improvements (payload and range).

Innovation [60 RP]

Innovations are like improvements, but have a threshold of 33%. This may be combined with an Improvement by adding an additional Improvement to combined the two (or more).

Example: The techie wants to increase the GU-11 gunpod's payload by 33% and the range by 10%. This requires three tests: 1 Innovation, 1 Improvement, and 1 more Improvement to combine the two.

Invention [100 RP]

Invention can either be an Improvement of greater than 33% increase, or making a new way of doing something similar or something new based on an existing design. Particle beam weapons were an Invention based on laser technology.

Example: The techie wants to double the firing rate of a GU-11 gunpod, increasing the BV to 6. Or maybe he wants to design a GU-11 variant with two sets of firing barrels. Both of these are Inventions.

The Research Process

When a techie attempts to improve, innovate or invent something, he must research how to make it happen.

At each interval of a day, week, month or year (set by the GM), the techie rolls TECH + Mecha Tech (or appropriate skill) + 1d10 at a difficulty outlined below.

Average (15) – Involves a simple problem such as a new use for existing technology or the engineer has already made three Improvements or one Innovation in this field.
Difficult (20) – Involves a limited field or the engineer has made no attempts at Improvement in this field.
Very Difficult (25) – Typically the engineer has never worked in this field at all, or involves lost/alien technology.

If the engineer succeeds at his roll, he adds the positive value over the difficulty to the RP (research point) pool. He rolls at each interval until he has enough RP to complete the research.

Breakthrough! – If the engineer rolls a Critical Success (rolls a 10), he gains twice the number of RP if he meets or exceeds the TN.

Stumped! – If the engineer rolls a Critical Failure (rolls a 1), he loses twice the number of RP even if he meets or exceeds the TN. If this reduces the number of RP to zero, there has been a terrible accident or setback which doubles the RP needed to research the technology.

Experimental and Prototype Technology

Experimental technology prototypes are still in the "work the bugs out" phase, while the test type is the first "expected to work" unit. At the GM's option, he may enforce the following rules for using such designs (highly appropriate for test pilots and engineers).

Experimental System: Roll when the pilot rolls a 1-2 on any roll involving the system or when an enemy rolls a 9-10 to hit that involves the system. Also roll if a servo takes 25% or more of its Kills in damage in

one hit.

Prototype System: As above, but only on Critical Failures and Critical Hits (respectively).

Test System: At this point the chart is only used if the GM feels it dramatically appropriate.

Failure Table (Select an appropriate result, or roll randomly.): Reroll if the result makes no sense – such as a destroid getting the FAS damaged roll. Certain rolls will leave a variable fighter unable to transform.

d100	Oh crap! What happens?
01	Massive failure: The power plant suffers a massive overload and explodes (count as a powerplant hit). The blast inflicts 10K to a 10m radius. This is VERY bad news, unless a redundant system is on-board. The pilot may attempt an emergency ejection roll or he is automatically pasted.
02	Massive failure: A mechanical failure causes a critical portion of the mecha to tear loose. Immediate pilot roll at -5 (or eject), or suffer an uncontrolled crash. Either way, you're coming down.
03	Massive failure: A weapon system suffers an unknown failure, and detonates. Damage is for the normal damage of the weapon to a 3m radius. The weapon is destroyed, and if a missile or ballistic system, additional payload may detonate. Oh, that's not good.
04	Critical failure: A system surges and burns out, fusing two additional components. That servo suffers 4K (ignore armor), and all affected components are reduced to slag. Why isn't my landing gear deploying?
05-06	Critical failure: A component suffers a partial overload, tripping control devices. Power is lost for two actions as the safety resets, and the affected system is rendered inoperable, needing repairs. Hey, it could have been a whole lot worse!
07-10	Critical failure: All optical sensors go down. The bonuses they provide are lost, as well as an additional -1 to WA. New sensors will need to be installed. Being blind is a really bad thing!
11-14	Critical failure: Power delivery regulator goes off-line, and requires repair and re-calibration. Craft moves 20% faster, but the pilot is -3 on pilot rolls. Now you're cooking with fire…
15-20	Moderate failure: The weapon fires at its maximum rate for two turns, or until all ammo is expended, and cannot fire for two minutes while it cools. Runaway guns are not a good thing.
21-30	Moderate failure: The entire communications system crashes, and is out for five minutes while the system reboots. Hopefully you didn't miss any important traffic information.
31-35	Moderate failure: Dynamic stresses cause a mechanical failure, and -2 to all pilot rolls until repairs are effected. Where did I put that roll of duct tape?
36-40	Moderate failure: The radar system goes nuts, reading multiple echoes from every target it is scanning. The unit requires re-calibration. Sir! I read one really BIG bandit on my scope!
41-50	Moderate failure: The primary targeting computer crashes, and the pilot looses all bonuses from the system. The computer will need the software reinstalled. Where did the cross-hairs go?
51-55	Moderate failure: The FAS craps out. Your variable fighter is not-so-variable now and is stuck in whatever configuration it was in. Non-VF instead have 1d3 servos lock up.
56-65	Incidental failure: The tactical band radio either will not transmit or receive, and requires servicing. This makes local communication difficult at best.
66-70	Incidental failure: A random weapon system fires spontaneously, striking a random target. Dangerous as well as embarrassing.
71-75	Incidental failure: A control surface is not responding properly. The pilot is at -1 to pilot rolls until repairs are made. Left! I want to go LEFT!
76-80	Incidental failure: The weapon system that was activated does not fire due to a stoppage. The weapon clears itself in one turn. Things like this can really ruin your day.
81-85	Incidental failure: The weapon triggered does not fire. Can attempt to fire again with the next action. It's the loudest silence you'll ever hear.
86-90	Incidental failure: Combat computer loses the ability to toggle weapons or select status for one minute before the system self-corrects. Hopefully you weren't weapons cold, and have a good

	weapon up.
91-95	Quirk: One or more warning indicators go off simultaneously, and continue blaring for two minutes before shutting off. Craft functions normally, but -2 to combat rolls due to the distraction.
96-00	Quirk: Acrid smoke begins to fill the pilot's compartment, and it takes four minutes for the environmental system to clear the cockpit. -1 to combat rolls from the watering eyes and headache the fumes cause.

Mecha Building

This won't be a complete recompilation of the Mekton Zeta Plus book, only the parts relevant to making variable fighters, destroids or Zentraedi battle pods/power armor.

Miscellaneous Options

Weapons Crosslinking

This allows multiple weapons to be linked through the FCS so that the pilot or gunner can fire all linked weapons with a single shot. This costs 2 CP if they are in the same servo, and 3 CP if they are in different servos (such as arm weapons). This cost is total, not per weapon.

Example: a variable fighter has networked micromissile racks; 2 per leg and 1 per shoulder, costing 3 CP to link them together as one weapon

Weapons Mating

This allows multiple weapons to be built together as a single weapon package, such as the Astra weapon clusters. Add up the Spaces of all weapons and divide by 1.33 to determine the Spaces of the group. If one weapon takes damage, all weapons in the group take damage; and if one is destroyed, the whole cluster is destroyed. Even if they are all in a cluster, they are independent unless also crosslinked.

System Splitting

This allows a system to be split between multiple servos. In Macross this has only pertained to the powerplant of a variable fighter being split half to each leg servo, and the SES being split between a pair of connected FAST packs. Such systems pay crosslinking costs as above, except for hand-held weapons, powerplants and thrusters; all of which are designed specifically for servo splitting and have no additional cost.

Space Efficiency

Most systems other than the cockpit, storage compartment and any other system that specifically says otherwise can be made to take less space. Every 1 Space reduced costs 0.5 CP. Weapons and systems can be reduced to effectively 0 Spaces, such as the head mounted lasers on a VF. Cockpits, thrusters and missile bays cannot be reduced below 1 Space. Ballistic weapon payloads may not be reduced below 1 Space.

Weight Efficiency

Every ton of weight removed costs 2 CP.

Weight Inefficiency

The mecha can be made to weigh twice as much as its indicated tons (see below). Instead of a CP per ton rate, the mecha gets a x-0.2 multiplier (again, see below), making the mecha cheaper.

Size Classifications

To save on typing, all charts use the following abbreviations:

Superlight	SL
Lightweight	LW
Striker	STR
Medium Striker	MS
Heavy Striker	HS
Mediumweight	MW
Light Heavy	LH
Medium Heavy	MH
Armored Heavy	AH
Super Heavy	SH
Mega Heavy	MgH

Weapons

Adding weapons makes a mecha get very expensive very quickly. This is because the weapons and ammunition will end up getting any cost multipliers applied to themselves as well. When designing a mecha, keep these guidelines in mind:

* Non-removable weapons, such as head lasers, are not meant to be removed to from the mecha, and should be included in the basic structure costs (and thus get cost multipliers).

* Disposable weapons, including missiles and gunpods, should be added on after the total cost of the mecha is calculated. This is because the weapons themselves are not part of the mecha, and can be swapped or used up quickly, and would radically change the effective CP of the mecha in question (if a VF-25 picks up an old GU-11, the CP of the mecha itself should not actually change). Such weapons are built separately and assigned to a mecha much like an infantryman would carry grenades and an assault rifle.

Framework

Servo Structure

Servos are the basic structure of the mecha; frame, reinforcements, joints & actuators, hydraulics or myomar bundles and internal shielding.

All servos can gain additional Spaces in exchange for Kills. Each Kill of structure traded grants the servo an additional 2 Spaces.

All servos can gain additional Kills in exchange for Spaces. Each Kill of structure gained takes up 2 Spaces and costs 2 CP.

Torso Servo

This is the main component of a mecha, and need not be a "torso"; it can be a hull of a fighter, tank or starship. You may attach no more than 12 sub-servos (arms, wings, etc) to the torso, and no sub-servo may be more than 1 size class larger than the torso.

Servo	SL	LW	STR	MS	HS	MW	LH	MH	AH	SH	MgH
Cost/Space/Kills	2	4	6	8	10	12	14	16	18	20	22

Head Servo

This is any type of turret mount. Sensors *not* placed in the head servo suffer a -2 penalty to Awareness/Notice rolls (only for humanoid or mechabeast types).

Servo	SL	LW	STR	MS	HS	MW	LH	MH	AH	SH	MgH
Cost/Space/Kills	1	2	3	4	5	6	7	8	9	10	11

Arm Servo

Arms are not assumed to have hands (+0 WA, 1K, 1 Space, 1 Kill, Quick, Handy, 2 CP).

Servo	SL	LW	STR	MS	HS	MW	LH	MH	AH	SH	MgH
Cost/Space/Kills	2	3	4	5	6	7	8	9	10	11	12
Damage Bonus	+0	+0	+0	+1	+1	+1	+2	+2	+2	+3	+3
Throw Range	1	2	2	3	3	4	4	5	5	6	6

Leg Servo

Unlike arms, legs are assumed to have feet standard, otherwise they are arms. Leg servos may not be more than 1 size class smaller than the torso. In the case of a mecha with more than two legs, the sum of the Kills of all leg servos may not be less than 2 Kills lower than the torso servo.

Servo	SL	LW	STR	MS	HS	MW	LH	MH	AH	SH	MgH
Cost/Space/Kills	2	4	6	8	10	12	14	16	18	20	22
Damage Bonus	+0	+0	+1	+1	+2	+2	+3	+3	+4	+4	+5

Wing & Tail Servo

Any wing servos no smaller than 2 size classes smaller than the torso grant +2 flight MA. Tails can also serve as tentacles capable of entangling attacks.

Servo	SL	LW	STR	MS	HS	MW	LH	MH	AH	SH	MgH
Cost/Space/Kills	1	2	3	4	5	6	7	8	9	10	11

Pod Servo

Pods are "empty" servos held together by the armor covering them. Pods ignore the servo size restriction, although for every 2 size classes larger than the torso, the mecha suffers a -1 MV penalty.

Servo	SL	LW	STR	MS	HS	MW	LH	MH	AH	SH	MgH
Cost	1	2	3	4	5	6	7	8	9	10	11
Spaces	2	4	6	8	10	12	14	16	18	20	22

Wheels & Treads

Although not servos, they are built into servos. Neither take up any spaces, but the Kills of the system must be allocated to servos for hit determination. Loss of half the locations negates the bonuses. Wheels grant +2 land MA while treads negate MA

penalties for all terrain except water and swamp. To get both bonuses, both systems must be purchased.

Wheels	SL	LW	STR	MS	HS	MW	LH	MH	AH	SH	MgH
Cost/ Kills	1	2	3	4	5	6	7	8	9	10	11

Treads	SL	LW	STR	MS	HS	MW	LH	MH	AH	SH	MgH
Cost/ Kills	2	4	6	8	10	12	14	16	18	20	22

Monocoque

French word meaning "single shell". A type of fuselage construction in which the outer shell carries all or most of the stress, with no internal bracing. Essentially, the outer shell acts as an exoskeleton; all internal components are supported by (and often attached to) the armor. This gives large inner volume to work with, with plenty of space for machinery, cables, components, and fuel. The main disadvantage is lack of flexibility; mecha made with monocoque construction cannot have hinged armor skirts, or large gaps in the armor for joints. Automobiles use monocoque construction.

Monocoque designs receive a +50% bonus to the number of Spaces in each Servo location. They receive a -x0.1 Cost Multiplier to their total cost. However, to reflect the very limited mobility of monocoque designs, they receive a -2 penalty to their MV. In addition, no matter how light it is made, or how many verniers packed into it, the MV can never be raised above -2. Bonuses from engines may still increase this.

Examples: Zentraedi power armor suits

Semi-Monocoque

A semi-monocoque design is an improvement upon the monocoque designs, without having made the jump to movable frames. In semi-monocoque designs the external shell and internal components are supported by a frame-work of internal bracing, which bears all the stress. This allows for hinged armor skirts and easier maintenance. Modern aircraft are semi-monocoque designs.

Semi-Monocoque designs receive a +25% bonus to the number of Spaces in each Servo location. They receive a -x0.05 Cost Multiplier to their total cost. However, to reflect the limited mobility of semi-monocoque designs, they receive a -1 penalty to their MV. In addition, no matter how light it is made, or how many verniers packed into it, the MV can never be raised above -1. Bonuses from engines may still increase this.

Examples: variable fighters and destroids

Movable Frame

The movable frame is a quantum improvement upon semi-monocoque design. The movable frame act as a fully articulated endoskeleton. Machinery and systems installed within the frame, which supports them and protects them from shocks. Armor is then attached to the frame to cover vital areas such as the power plant and cockpit. Lacking armor at the joints and hinged armor skirts allow for maximum mobility, surpassing all other methods of construction. Movable frames also allow for superior transforming mecha.

Movable frame designs are considered to be the "basic" design in Mekton and have no further modifiers.

Examples: none in Macross (most Gundams; Heavy Metal L-Gaim was the first anime to even mention a movable frame design)

Mecha STRength

How much can my mecha lift? That depends on the overall structure of the mecha. If the mecha has HS torso and legs, but only MS arms, that reduces the amount the mecha can lift because the arms are weaker than the rest of the structure. To find the effective STR stat, you must first find the average value of the arm/torso/leg servos, rounding *down*. If the entire mecha is HS servos, that is easy, but mixed servos makes the math a little more involved. Once the average value is figured, look on the chart below:

	Human 1/10	**Roadstriker 1/5**	**Mekton 1/1**	**Corvette 1:10**	**Starship 1:100**
SL	1	7	12	16	19
LW	2	7	13	16	20
STR	3	8	13	16	21
MS	4	8	14	17	22
HS	5	9	14	17	23
MW	6	9	14	17	24
LH	7	10	15	18	25
MH	8	10	15	18	26
AH	9	11	15	18	27
SH	10	11	16	19	28
MgH	11	12	16	19	29

And this gives us the base STRength of the mecha for purposes of lifting capability only (damage is calculated differently). This lifting value then gets modified according to the hydraulics modifier; x1.5 for heavy and x2.0 for superheavy.

Mecha are inherently stronger than flesh and blood. Hyper carbon alloy, titanium and composite materials can withstand greater pressure and thus lift more than the same "strength" of biological matter. Thus, mecha use a different strength lifting chart than "squishies". For example, mecha STR of 11 is the equivalent of human STR of 20.

Mecha built on the human or roadstriker scale should still use this chart below, while those with cybernetics should still use the "human" lifting chart in the basebook unless they have full body replacement, then they can use this chart as well. It also assumes earth's 1G or equivalent (multiply by the % of gravity).

Mecha STR	**Lift (kg)**	**Lift (pounds)**	**Example of weight**
0	36 kg	72	infant
1	50	110	child
2	72	158	adult female
3	100	220	adult male
4	144	317	
5	200	440	lion
6	288	634	motorcycle
7	400	880	
8	575	1265	small car
9	1150 (ton)	1.265 ton	large car
10	2500	2.75	small semi-truck
11	5000	5.5	APC, Miriya (macronized)
12	10,000	11	average VF unit
13	20,000	22	MBT, average Destroid
14	40,000	44	jet fighter
15	80,000	88	

16	160,000	176	VB-6 Koenig
17	320,000	352	HWR-00-Mk II Monster
18	640,000	704	destroyer
19	1,250,000 (kiloton)	1.375 kiloton	
20	2,500,000	2.75	
21	5,000,000	5.5	building
22	10,000,000	11	loaded train
23	20,000,000	22	
24	40,000,000	44	
25	80,000,000	88	
26	160,000,000	176	
27	320,000,000	352	Oberth destroyer
28	640,000,000	704	CVN Asuka II
29	1,250,000,000 (megaton)	1.375 megaton	nuclear submarine
30	2,500,000,000	2.75	Ark Royal carrier
31	5,000,000,000	5.5	
32	10,000,000,000	11	
33	20,000,000,000	22	SDF-1 Macross
34	40,000,000,000	44	Mt. Everest
35	80,000,000,000	88	
36	160,000,000,000	176	Neo Nupetiet Vergnits-biz
37	320,000,000,000	352	
38	640,000,000,000	704	
39	1,250,000,000,000 (gigaton)	1.375 gigaton	
40	2,500,000,000,000	2.75	
41	5,000,000,000,000	5.5	
42	10,000,000,000,000	11	
43	20,000,000,000,000	22	Macross Frontier (city)

Mecha strength cuts off at 29 for a starship scale mecha, such as possibly Battle Frontier. The rest of the chart mostly serves as a guideline as to how much lifting power is needed for some *really* heavy things. While it could be possible to make mecha in the excessive scale that could lift such beastly amounts, it is well outside the realm of Macross for such ideas... Unicron anyone?

** These values mean lifting that weight to roughly waist level. Lifting overhead is only ***1/2*** the listed value. Carrying, pushing or throwing is only ***1/4*** of the listed value.**

Example: a mecha with all SH servos has an effective STRength stat of 16, allowing it to lift 160,000 kg. If it has superheavy hydraulics (x2.0), then it can lift up to 320,000 kg. If it wants to -carry- then it can move 40,000 kg (or 80,000 kg with superheavy hydraulics).

<u>Mecha EV</u>

Just like a person, a mecha has an encumbrance value. Heavy and superheavy hydraulics will increase the EV by x1.5 and x2.0 respectively.

1/10 Scale: Servo x2.5
1/5 Scale: Servo x25
1:1 Scale: Servo x0.5
1:10 Scale: Servo x5
1:100 Scale: Servo x (lift capacity / 10)

Going with the above example of a 1:1 mecha with SH(10) servos will have an EV of 25. When the mecha is carrying an object, divide the weight of the object by 25 to determine the penalty to MV and MA. If the mecha has heavy hydraulics, the EV increases to 37.5.

Armor

A mecha without armor is a waste of CP. Armor uses staged penetration; that is for every hit it takes of 1K or more, regardless if the hit penetrates the armor to the servo underneath or not, the armor SP is reduced by 1. Advanced armor materials can increase the damage needed to reduce armor SP, and cheap ablative armor has the SP reduced by the amount of the damage.

Any servo level may have any level of armor without penalty.

Armor Level	SL	LW	STR	MS	HS	MW	LH	MH	AH	SH	MgH
Cost/SP/Kills	1	2	3	4	5	6	7	8	9	10	11

Ablative x0.5 (DC 0; SP reduced equal to K of damage)
Alpha x1.25 (DC 2; attack must be 2K or more to reduce armor)
Beta x1.5 (DC 4)
Gamma x2.0 (DC 8)

Weapons

Mecha are by and large war machines. Thus they need weapons to commit war. Chapters 1, 2 & 6 list out most of the commonly used weapon systems for variable fighters, destroids, battroids, battle pods and power armor. Weapons fall into the following categories:

Energy Weapons: This includes lasers, plasma cannons, particle beam cannons, ion cannons and other beam-type ranged weapons. They are more expensive, but have the benefit of unlimited ammunition.

Melee Weapons: Swords, knives, clubs, axes, etc. Other than the destroid club used by the Spartan and the combat knife of the VF-25/27/29, there is no real use in Macross.

Energy Melee Weapons: Beam sabers are common in Gundam, L-Gaim and Mekton, but none are seen in Macross.

Missile Weapons: Yes have some. The phrase "Macross Missile Massacre" didn't get the name for nothing.

Projectile Weapons: Gunpods, railguns and the cannons used by the Monster are good examples. Easily the second most common weapon type used in Macross.

Energy Pools: This applies to an energy weapon of some type that has multiple weapon functions from the same weapon. The only notable example is the YF-27 quantum beam gun/beam grenade.

If you really need to design new weapons, the charts in Mekton Zeta Plus from page 25-40 will be needed.

Thrusters & Powerplant

Variable fighters typically have two powerplant/thruster units (one per leg), while destroids have a main powerplant and a backup generator. Below is a chart of the known

listed variable fighter powerplants, mostly built by Pratt & Whitley / Rolls Royce / Shinnakasu (Shinsei).

Engine Unit	Thrust Output	VF-used
EGF-127 conventional thrusters	9287kg	VF-0
Aviadvigatel D-30F6X conventional engine	10,452kg	SV-51
L.A.I. ELA-3000	64,242kg	VF-1 Plus Plus
Shinnakasu/Daimler FF-2770D	52,500kg	VF-14/VA-14
Shinnakasu/P&W/Royce FF-2001	11,500kg	VF-1
Shinnakasu/P&W/Royce FF-2001D		VF-1S
Shinnakasu/P&W/Royce FF-2009E		VF-17A
Shinnakasu/P&W/Royce FF-2010	59,959kg	SV-52γ
Shinnakasu/P&W/Royce FF-2011	14,000kg	VF-4
Shinnakasu/P&W/Royce FF-2011+	16,500kg	VF-4G/-4SL
Shinnakasu/P&W/Royce FF-2019C	19,600kg	VF-9
Shinnakasu/P&W/Royce FF-2020A	22,000kg	VA-3
Shinnakasu/P&W/Royce FF-2025BX	31,700kg	VB-6
Shinnakasu/P&W/Royce FF-2045C	63,222kg	VF-9E
Shinnakasu/P&W/Royce FF-2079J	15,000kg	VF-X Plus
Shinnakasu/P&W/Royce FF-2100X	55,000kg	VF-17D
Shinnakasu/P&W/Royce FF-2100X tuned	59,500kg	VF-17T Kai
Shinnakasu/P&W/Royce FF-2110A	45,469kg	VF-171
Shinnakasu/P&W/Royce FF-2450A	22,500kg	VF-3000
Shinnakasu/P&W/Royce FF-2450B	41,200kg	VF-22S
Shinnakasu/P&W/Royce FF-2550F	82,500kg	VF-171EX
Shinnakasu/P&W/Royce/MG FF-3011	140,414kg	VF-27
Shinnakasu/P&W/Royce/MG FF-3011C	140,414kg	YF-27-5
Shinsei Industry/P&W/Royce FF-2015B	22,500kg	VF-5000
Shinsei Industry/P&W/Royce FF-2025G	28,500kg	VF-11A, -D Thunder Focus
Shinsei Industry/P&W/Royce FF-2025G+	35,690kg	VF-11B Nothung II
Shinsei Industry/P&W/Royce FF-2099A	41,500kg	VF-11MAXL/VF-16
Shinsei Industry/P&W/Royce FF-2200	56,500kg	VF-19A
Shinsei Industry/P&W/Royce FF-2450C	62,712kg	VF-22HG
Shinsei Industry/P&W/Royce FF-2550E		VF-19E/-EF
Shinsei Industry/P&W/Royce FF-2550F	82,500kg	VF-19 Kai
Shinsei Industry/P&W/Royce FF-2550J	78,500kg	VF-19F
Shinsei Industry/P&W/Royce FF-2550X	78,950kg	VF-19S
Shinsei Industry/P&W/Royce FF-3001A	165,194kg	VF-25
Shinsei Industry/P&W/Royce FF-3001	214,650kg	YF-29 (leg)
Shinsei Industry/P&W/Royce FF-3003J	149,898kg	YF-29 (wing)
Shinsei Industry/P&W/Royce FF-3600J	64,242kg	VF-11 Interceptor

For variable fighters, determining the MA is figured by taking the total thrust output of the engines and dividing by the mass. This gives the acceleration in G's. Take that and multiply by 8 to find the MA of the fighter configuration.

To figure the MA per thruster, first take the MA from above and subtract 2 for the bonus MA from having wings. Divide the remaining in half to find the battroid MA, then divide that by half to find the MA per thruster.

Example: The VF-1A has 2x Shinnakasu/P&W/Royce FF-2001 11,500kg powerplants and weighs 13,250kg. Putting this into the formula gives: ((11,500 x2) = 23,000 / 13,250) = 1.7G acceleration, x8 = 13.6 MA, round up to 14 MA. Then subtract 2 for the wings to 12 MA. This becomes 6 MA in battroid (9 MA in gerwalk). Finally this becomes MA 3 per thruster. Pretty simple.

Additives

The first step of calculating the cost of a mecha is to add up the CP of the servos, armor, integral weapons (excluding missiles and gunpods) and non-multiplier systems such as pinpoint barriers and hardpoints. Common options for mecha in Macross include:

Combat Computer [5.5 CP, 1 Space]
Pinpoint Barrier System [107.2 CP, 8 Kills, 1 Space]
Standard Options (storage, etc) [8 CP]
EX System [10 CP]
Hardpoint (fuselage or wings) [3 CP, 1 Space]
Low Visibility Paint Scheme [1 CP]
Self Destruct [5 CP]
Hardpoints [3 CP each]

Multipliers

These do not add a fixed cost to a mecha, but rather increase the overall cost. Any and all mecha automatically start at a multiplier of x1.0, meaning they cost whatever the CP value comes up to. All other multipliers add to this factor, increasing the total cost. For example, variable fighter has a multiplier of x0.8, which instantly increases the CP cost of the mecha by 80% (x1.8 multiplier). Most multipliers are detailed further in Chapter 1, but here is a quick listing of standard options.

Variable Fighter [x0.8]
Space Variable Fighter [x0.45]
Advanced Variable Fighter [x0.9]
SW-AG Armor [x0.05]
Stage II SW-AG Armor [x0.1]
Autopilot [x0.35]
Powerplant: Hot Fusion (Standard) [x-0.1]
Powerplant: Hot Fusion (Overcharged) [x0.05]
Powerplant: Hot Fusion (Supercharged) [x0.2]
Transatmospheric Ability [x0.15]
Environmental Package (space, reentry, desert) [x0.2]
Inertial Dampening System [x0.2]
Active Stealth [x1.05]
Passive Stealth [x0.2]
BCS/BDI [x0.5]

Example: A variable fighter (x0.8) usually has SW-AG Armor (x0.05), a hot fusion powerplant (-x0.1), environmentals (x0.2), auto pilot (x0.35) and transatmospheric capability (x0.15) as standard options. So at base you have: x1.0 + x0.05 + x0.5 + x0.35 + x0.15 - x0.1 = x1.95 or 195% cost. So if a variable fighter has a base CP cost of 200, the multipliers increase this cost to 390 CP.

Upgrading an existing mecha

As shown above, it can be quite expensive and time consuming to create a new mecha from scratch. Another good option is to upgrade an existing type, which is very common for Vanquish racing. Let's take a step-by-step look at upgrading an existing variable fighter for this purpose.

Step One - Base Unit

Vanquish pilot Magdalena Zielonaska gets hold of an old SV-51γ that was in storage for 50 years. She decides she likes the design, but in order to be competitive, that relic needs an overhaul. The first thing is to replace the old conventional jet fuel turbines with modern thermonuclear turbines. She also decides she needs to upgrade the armor, avionics and possibly the weapon systems.

Here are the original stats SV-51γ:

SV-51γ

COST: 234 CP
Availability: 2008

HEIGHT:
47.0 ft (14.10 m) in soldier configuration.
WIDTH:
?
LENGTH:
22.77m in fighter configuration
WEIGHT:
Empty: 17,800 kg
Standard T-O Weight: ?
Max T-O Weight: ?
Service Ceiling:
22,500m

Mode	MV	Land MA	Fly MA
Battroid	-1	6 (300m/round)	17 (850m/round)
Gerwalk	-2	3 (150m/round)	25.5 (1275m/round)
Fighter	-3	0	34 (1800m/round)

Maneuver Pool +33%

Servo	Class	Kills	Spaces	Armor	SP	Kills
Main Body	MS	8	10	STR	3	3
Head	LW	2	2	LW	2	2
Right Arm	STR	4	4	LW	2	2
Left Arm	STR	4	4	LW	2	2
Right Leg	STR	4	4	STR	3	3
Left Leg	STR	4	4	STR	3	3
Right Wing	LW	2	2	LW	2	2
Left Wing	LW	2	2	LW	2	2

Thrusters	Location	MA
Thruster	Right Leg	8
Thruster	Left Leg	8

Sensors	Location	Kills	Sensors	Communications
STR Class	Head	1	4 km	800 km

Weapon	Location	DMG	Range	WA	Kills	Shots	Notes
Hands	Arms	1K	Melee	+0	1	U	Quick, Handy
ROV-20 Laser	Head	1K	12	+1	1	U	Phalanx Variable
ROV-20 Laser	Head	1K	12	+1	1	U	Phalanx Variable

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight (x2), Storage Module, Escape Pod
Weapon Mount, Self Destruct, Combat Computer, Resolution Enhance (4x)
Hardpoints (1 on Main Body, 2 per Leg), +1000km of fuel, Flare/Chaff Dispenser (12 in each leg)

Multipliers
Environmentals (Arctic, Desert), Verniers (1 Main Body, 2 each Leg), Semi-monocoque, ACE +33%
Variable Fighter, Autopilot, Active Stealth (-3 to detect rolls)

Notes
The engines use liquid fuel, limiting the effective range of the fighter to close combat near a refueling source.

Step Two - Upgrade Plan

1) The old Aviadvigatel D-30F6X conventional turbofan jet engines get pulled out. In their place a pair of P&W Royce FF-2020 thermonuclear burst-turbine engines from the VF-17D are installed, giving the new design roughly the same performance as the VF-171.

2) While there is no direct translation for the avionics in Mekton, we will increase the performance to ACE +66% to represent the upgrades. It would also stand to reason that the sensor package needs to be updated to MS, and increase the resolution enhancement to x32 since that would be important in racing. And we will add backup sensors just in case.

3) The armor of the unit will be done completely in beta grade material since this is a unique racing fighter that will need to be able to withstand some dings, and being backed by the primary bank of Macross Frontier means only the best. Furthermore, the structure of the wings needs some improvement.

4) The gunpod will be upgraded to something more modern, but we can disregard it for the moment since it is treated separately.

5) The new unit should be space-worthy, and the old stealth system won't work against modern sensor packages so we can strip that out.

Step Three - Mekton System Upgrade

1) The planned speed for the SV-52 γ is going to be Mach 4.8 up to 10,000m and Mach 21+ past 30,000m. This will also make the new unit transatmospheric capable. The engines as they are on the VF-17D grant MA 24.5 each and cost 11.3 CP each. Adding the transatmospheric ability is a cost multiplier of x0.15. These new engines are considered "overcharged" and have a cost multiplier of x0.05. The old engines are 7.7 CP each.

2) Increasing ACE 33% to ACE 66% increases the cost multiplier from x0.05 to x0.1. The new sensors upgrade from 2 to 6 CP, and the resolution enhancement goes up from 1 to 3 CP. Backup sensors add 2 CP.

3) First upgrading all armor locations to MS/beta armor is 48 CP up from 19 CP for the original. Increasing the wing servos from LW to STR ups the cost from 4 CP to 6 CP. Upgrading the head servo from LW to STR ups the cost from 2 CP to 3 CP.

4) Skip for now.

5) Adding space environmental is a cost multiplier of x0.05. Removing the old stealth system is a cost multiplier of x0.1.

Step Four - Doing the Math

The MA from the engines gives flight speed for battroid configuration; fighter configuration doubles that. The new engines should still provide MA 24.5 each just to make things simple. Now, the SV-52γ weighs more than the VF-17D (assuming same weight as the SV-51γ), so the new CP for the -same- engines increases to 16.3 CP. Why does the cost increase for the exact same engines you just yanked out of another variable fighter five minutes ago? The CP increase represents having to re-tune the engines to get the same speed out of a heavier chassis.

Step Five - Final Design

After recalculating the cost multipliers and the base CP of the new unit, we come to a new value of 424 CP.

SV-52γ Oryol

COST: 424 CP
Availability: 2058
Manufacturer: Sukhoi/Israel Aviation Arsenal/Dornier/Vistula & Oder

HEIGHT:
47.0 ft (14.10 m) in soldier configuration.
WIDTH:
?
LENGTH:
22.77m in fighter configuration
WEIGHT:
Empty: 17,800 kg
Standard T-O Weight: ?
Max T-O Weight: ?

Mode	MV	Land MA	Fly MA
Battroid	-0	6 (300m/round)	49 (2450m/round)
Gerwalk	-1	3 (150m/round)	73.5 (3675m/round)
Fighter	-2	0	98 (4900m/round)

Maneuver Pool +100%

Servo	Class	Kills	Spaces	Armor	SP	Kills	
Main Body	MS	8	10	MS/b	4	4	(DC 4)
Head	STR	3	3	MS/b	4	4	
Right Arm	STR	4	4	MS/b	4	4	
Left Arm	STR	4	4	MS/b	4	4	
Right Leg	STR	4	4	MS/b	4	4	
Left Leg	STR	4	4	MS/b	4	4	
Right Wing	STR	3	3	MS/b	4	4	

Left Wing	STR	3	3	MS/b	4	4

Thrusters	**Location**	**MA**
Thruster	Right Leg	24.5
Thruster	Left Leg	24.5

Sensors	**Location**	**Kills**	**Sensors**	**Communications**
MS Class	Head	2	11 km	1300 km
Backup	Torso	2	1 km	300 km

Weapon	**Location**	**DMG**	**Range**	**WA**	**Kills**	**Shots**	**Notes**
Hands	Arms	1K	Melee	+0	1	U	Quick, Handy
ROV-20 Laser	Head	1K	12	+1	1	U	Phalanx Variable
ROV-20 Laser	Head	1K	12	+1	1	U	Phalanx Variable

Optional Systems
Liftwire, Anti-theft Codelock, Nightsight, Spotlight (x2), Storage Module, Escape Pod Weapon Mount, Self Destruct, Combat Computer, Resolution Enhance (32x) Hardpoints (1 on Main Body, 2 per Leg), Flare/Chaff Dispenser (12@ in each leg)

Multipliers
Environmentals (Arctic, Desert, Space), Verniers (1 Main Body, 2 each Leg), Semi-monocoque Variable Fighter, Autopilot

Notes
Overhauled unit that was in storage for 50 years. Upgraded with the same engines as the VF-17D, giving it performance comparable to the VF-171.

And there we have it. A 50 year old mecha that can now keep pace with the newest tech.

Resources and Thanks

* Special thanks to MasumiX from Macross RPG Community for helping translate Macross Hobby Magazine entries.

Mekton Zeta http://www.mektonzeta.com/archive/expansionarchive.php
*many ideas for revised rules/mechanics